

Indian Hemp Drugs Commission.

VOL. VI.

EVIDENCE OF WITNESSES

CENTRAL PROVINCES AND MADRAS

INDIAN HEMP DRUGS COMMISSION.



सत्यमेव जयते



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QUESTIONS FRAMED BY THE COMMISSION.

Evidence before the Indian Hemp Drugs Commission, 1893-94.

CHAPTER I.

INTRODUCTORY.

1. What opportunities have you had of obtaining information regarding the matters connected with hemp drugs in regard to which your answers are framed?

2. In the most recent work on ganja (Dr. Prain's report of 21st June 1893) it is stated that "in India three narcotic articles are obtained naturally from hemp. These are, siddhi or bhang, charas, and ganja." They are thus defined by Dr. Prain: "Siddhi, bhang, subji or patti are different names applied to the dry leaves of the hemp plant, whether male or female and whether cultivated or uncultivated.

"Charas is the name applied to the resinous matter which forms the active principle of the plant when collected separately.

"Ganja consists of the dried flowering tops of cultivated female hemp plants which have become coated with resin in consequence of having been unable to set seeds freely. The formation of seeds is prevented by the destruction of all the male plants.

"Three varieties of ganja are sold. Ganja is usually manufactured by being trodden under foot, so that the agglutinated flower-tops assume a flattened shape. This is 'Flat ganja.' The other sort of ganja is not trodden, but rolled under foot, so that the agglutinated flower-tops are less closely adherent, and assume a rounded shape. This is 'Round ganja.' The flower-tops of ganja detached from the twigs, whether of flat or of round ganja, and whether the detachment has been accidental or deliberate, form 'chur' or 'Broken ganja.'"

May these definitions be accepted for your province? By what name is each of these products locally known?

CHAPTER II.

CULTIVATION OR GROWTH OF HEMP.

(*Cannabis sativa*.)

3. In what districts of which you have knowledge does the hemp plant grow spontaneously? Mention any in which it is abundant.

4. By what different names is it known? Do these refer to exactly the same plant?

5. What special conditions of climate, soil, rainfall, elevation above sea level, etc., are necessary to the growth of the wild hemp?

6. Is the growth of the wild hemp ordinarily dense, or scattered?

7. Is there any cultivation of the hemp plant in your province—

- (a) for production of ganja;
- (b) for production of charas;
- (c) for use as bhang;

(d) for its fibre or seeds;

If so, where and to what extent?

8. If there has recently been any considerable increase or decrease in the area under such cultivation, state the reason.

9. Give any particulars you are able regarding the methods of such cultivation.

10. Do the persons who cultivate hemp for its narcotic properties form a special class? Or are they of the same classes as other agricultural cultivators?

11. Are the plants cultivated for the production of ganja ever raised from the seed of the wild hemp?

12. Have you any reason to suppose that the (so-called) wild hemp is anywhere specially cultivated for the production of ganja? If so, give the names of the districts or tracts in which this occurs, and your opinion as to the extent to which the practice exists. Is the male plant extirpated in such cases?

13. (a) Is the cultivation of hemp plant for ganja restricted in your province? If so, to what districts? Why were they selected? If not restricted, is the cultivation common to all districts?

(b) Are there any special conditions of climate, soil, rainfall, elevation above sea-level, etc., which are necessary for the cultivation of hemp for producing ganja?

(c) Is there any part of your province where its cultivation would be impossible?

CHAPTER III.

PREPARATION OR MANUFACTURE.

14. Are any of the following products of the hemp plant prepared in your province:—

- (a) ganja,
- (b) charas,
- (c) bhang?

If so, where and to what extent?

15. Give any particulars you are able regarding the methods of such preparation, distinguishing specially the methods of preparation from (a) the cultivated, and (b) the wild plant respectively, and distinguishing also preparations for (A) smoking, (B) eating, and (C) drinking.

16. (a) Is bhang prepared generally by the people in their houses?

(b) Can it be prepared from the hemp plant wherever grown?

(c) Can ganja or charas also be prepared from the wild plant wherever grown?

17. By what classes of the people are the preparations of the hemp drug respectively made?

18. Does any of these three drugs (ganja, charas, and bhang) deteriorate by keeping? Does

it quite lose its effect in time? How long does it keep good with ordinary care? What are the causes of deterioration? What special measures can be taken to prevent deterioration?

CHAPTER IV.

TRADE.

(Statistics to be obtained from Government offices.)

CHAPTER V.

CONSUMPTION OR USE.

NOTE.—It is very important, in answering the questions framed under this chapter, to distinguish carefully between ganja, charas, and bhang. The answer should deal only with those forms of the drug known to the witness, and should clearly specify in each case the form or forms to which his statements apply.

19. Are ganja and charas used only for smoking? If not, name any other uses to which either is put, with particulars as to such uses, and the places where they are prevalent.

20. What classes and what proportion of the people smoke ganja and charas respectively? and in what localities?

21. What kind of ganja (flat, round or "chur") is preferred for smoking? If different kinds are used in different localities, give particulars.

22. What charas, native or foreign, is chiefly used? If foreign, whence is it imported?

23. Is bhang ever used for smoking? If so, in what localities, by what classes of the people, and to what extent?

24. What classes and what proportions of the people respectively (a) eat or (b) drink bhang, and in what localities?

25. Is the use of ganja, charas, and bhang, or of any of these drugs, on the increase or on the decrease?

Give any reasons you are able.

26. State for each of these drugs what proportion of the consumers are—

- (a) Habitual moderate consumers,
- (b) Habitual excessive consumers,
- (c) Occasional moderate consumers,
- (d) Occasional excessive consumers.

27. What classes of the people are each of these mainly taken from, and what in each case are the habits of life or circumstances which mainly lead to the practice?

28. What is the average allowance and cost of each of these drugs per diem to—

- (a) Habitual moderate consumers,
- (b) Habitual excessive consumers?

29. What ingredients are (a) ordinarily or (b) exceptionally mixed with any of these drugs by the different classes of consumers? Is dhatura so used? What is the object of these admixtures?

Do you know of any preparation (such as "bharg massala") which is sold for the purpose of being mixed with any of these drugs? Describe its ingredients.

30. (a) To what extent is the consumption of each of these three drugs practised in solitude or in company?

(b) Is it mainly confined to the male sex or to any time of life?

(c) Is it usual for children to consume any of these drugs?

31. (a) Is the habit of consuming any of these drugs easily formed?

(b) Is it difficult to break off?

(c) Is there a tendency in the case of any of these drugs for the moderate habit to develop into the excessive?

32. (a) Mention any customs, social or religious, in regard to the consumption of any of these drugs. Give an account of every such custom.

(b) Is the use of the drug in connection with such custom regarded as essential?

(c) Is it generally temperate or excessive?

(d) Is it likely to lead to the formation of the habit, or otherwise injurious?

33. (a) How is the consumption of each of these drugs generally regarded?

(b) Can it be said that there is any public opinion (social or religious) in regard to the practice? If so, what? If you think that the use of any form of the narcotic is generally in disrepute, to what do you attribute that sentiment?

(c) Is there any custom of worshipping the hemp plant on certain occasions by certain sects of the people?

34. Would it be a serious privation to any class of consumers to forego the consumption of the drug they use? Give your reasons in each case. Give some idea of the probable numbers of each class.

35. (a) Would it be feasible to prohibit the use of any or all of these drugs?

(b) Would the drug be consumed illicitly?

(c) How could the prohibition be enforced?

(d) Would the prohibition occasion serious discontent among the consumers?

(e) Would such discontent amount to a political danger?

(f) Would the prohibition be followed by recourse to (a) alcoholic stimulants or (b) other drugs?

36. Is there any reason for thinking that alcohol is now being to a certain extent substituted for any of these drugs? If so, to what causes do you attribute this change, and what proof is there of its reality?

CHAPTER VI.

EFFECTS.

NOTE.—It is very important, in answering the questions framed under this chapter, to distinguish carefully between ganja, charas, and bhang. The answer should deal only with the form of hemp known to witness, and should clearly specify in each case the form or forms to which his statements apply, and the particular experiences on which they are based. Question 56 deals with the effect of admixtures. This should also be referred to in answering any question where any such admixture generally affects the case. But the answer ought, in the first instance, to deal with the effect of the hemp drug apart from any such admixture.

37. Are the effects of charas smoking different in any particular from those resulting from ganja smoking? If so, state the difference.

38. Have the three different preparations of ganja (round and flat ganja and "chur") any different effects in kind or degree on consumers?

39. Is the smoking of any preparation of the hemp plant in any way a less injurious form of consumption than drinking or eating the same or any other preparation? Give reasons for your answer.

40. (a) Is the use of any of these drugs prescribed on account of its medicinal qualities by any school of Native Doctors?

(b) Are any of them used in the treatment of cattle disease?

41. May the moderate use of charas, ganja, or bhang be beneficial in its effects—

(a) as a food accessory or digestive;

(b) to give staying-power under severe exertion or exposure, or to alleviate fatigue;

(c) as a febrifuge or preventive of disease in malarious and unhealthy tracts;

(d) in any other way.

What classes (if any) use the drug for any of the above purposes, and in what proportion of such classes? Is it the moderate habitual use or moderate occasional use of the drug which you refer to?

42. If not beneficial, do you consider the moderate use of any of these drugs to be harmless? Give reasons for your answer.

43. Are moderate consumers inoffensive to their neighbours?

44. (a) What is the immediate effect of the moderate use of any of these drugs on the habitual consumer?

(b) Is it refreshing?

(c) Does it produce intoxication?

(d) Does it allay hunger?

(e) Does it create appetite?

(f) How long does the effect last?

(g) Are there any after-effects?

(h) Does the want of subsequent gratification produce any longing or uneasiness?

45. (a) Does the habitual moderate use of any of these drugs produce any noxious effects—physical, mental, or moral?

(b) Does it impair the constitution in any way?

(c) Does it injure the digestion or cause loss of appetite?

(d) Does it cause dysentery, bronchitis, or asthma?

(e) Does it impair the moral sense or induce laziness or habits of immorality or debauchery?

(f) Does it deaden the intellect or produce insanity?

If it produces insanity, then of what type, and is it temporary or permanent?

If temporary, may the symptoms be re-induced by use of the drug after liberation from restraint?

Are there any typical symptoms?

Do insanes, who have no recorded ganja history, confess to the use of the drug?

(g) In such cases of the alleged connection between insanity and the use of hemp as are known to you, are you of opinion that the use of the drug by persons suffering from mental anxiety or brain disease to obtain relief has been sufficiently considered in explaining that connection?

And do you think there is any evidence to indicate that insanity may often tend to indulgence in the use of hemp drugs by a person who is deficient in self-control through weakened intellect?

Give an account under each of these points of any cases with which you are acquainted.

46. Discuss the same question in regard to the habitual excessive use of any of these drugs.

47. Does the habitual moderate use of any of these drugs appear to be a hereditary habit or to affect in any way the children of the moderate consumer?

48. Discuss the same question in regard to the habitual excessive use of any of these drugs.

49. (a) Is the moderate use of any of these drugs practised as an aphrodisiac?

(b) Is it so used by prostitutes?

(c) Is the use for this purpose more injurious than its use as an ordinary narcotic, and, if so, how?

(d) Does the use of hemp tend to produce impotence?

50. Discuss the same question in regard to the excessive use of any of these drugs.

51. (a) Are any large proportion of bad characters habitual moderate consumers of any of these drugs?

(b) What connection, if any, has the moderate use with crime in general or with crime of any special character?

52. Discuss the same question in regard to the excessive use of any of these drugs.

53. Does excessive indulgence in any of these drugs incite to unpremeditated crime, violent or otherwise? Do you know of any case in which it has led to temporary homicidal frenzy?

54. Are these drugs used by criminals to fortify themselves to commit a premeditated act of violence or other crime?

55. (a) Do criminals, in order to further their designs, induce their victims to partake of any of these drugs and so stupefy themselves?

(b) Can complete stupefaction be thus induced by this drug without admixture.

56. How are the effects of hemp, used (a) in moderation and (b) in excess, modified by the admixture of other substances? Note specially any information you possess regarding the admixture of dhatura for personal consumption or for administration to others.

57. Ganja and charas are said sometimes to be eaten or drunk. Where this is the case, give your experience as to the effects, dealing separately with any of the heads in the preceding questions which seem to require notice.

CHAPTER VII.

ADMINISTRATION—TAXATION: CONTROL.

58. If you are acquainted with the present system of Excise Administration in your province in respect of hemp drugs, do you consider it to be working well, or do you consider it to be capable of improvement?

59. If capable of improvement, indicate in what direction or directions, giving reasons for your answer.

60. If ganja is produced in your province, do you think that the cultivation of the ganja-bearing plant and the process of its preparation are sufficiently controlled, or that the system requires modification in any respect? If so, in what respects and why?

61. If charas is produced in your province, do you think the cultivation of the hemp plant for its production and the process of preparation are sufficiently controlled, or that the system requires modification in any respect. If so, in what respects and why?

62. Do you think that the cultivation of the hemp plant for the production of bhang should be in any way controlled? Would this be feasible? If so, indicate the method by which such control could be exercised.

63. Have you any objection to the present system of $\frac{a \text{ wholesale}}{b \text{ retail}}$ vend of $\frac{1 \text{ ganja}}{2 \text{ charas}}$ or preparations of them? If you have any objections, state them at length, and indicate the improvements you suggest.

64. Have you any objections to the existing regulations governing the export and import of these drugs or of their preparations from and into your province, or their transport within the province? Give reasons for your answer.

65. In your opinion is the taxation of $\frac{1 \text{ ganja}}{2 \text{ charas}}$ $\frac{3 \text{ bhang}}$ reasonable with reference (a) to each other, (b) to

alcoholic or other intoxicants? Give reasons for any alterations in the amount of taxation of any of these articles which you may suggest.

66. In your opinion is it necessary that there should be different rates of taxation for different kinds of ganja (such as the "flat," "round," and "broken" ganja produced in Bengal), or for ganja grown in different localities? If so, on what principle?

67. Having regard to the ultimate incidence of the tax on the consumer, have you any objections to the present method of taxing $\frac{1 \text{ ganja}}{2 \text{ charas}}$ $\frac{3 \text{ bhang}}$?

68. Are there in your province houses or shops licensed for the sale of these drugs or their preparations where they may be consumed on the premises? What is your view in respect to such houses or shops?

69. Are the wishes of the people consulted or considered in any way before a shop is opened in any locality? What measures are taken for this purpose? Ought local public opinion to be thus considered?

70. Are there any facts regarding the importation or smuggling of hemp drugs from Native States into your province to which you wish to draw attention? Is duty really paid in respect to the ganja and other hemp drugs used? Or is there any general use of untaxed drugs, and by whom?



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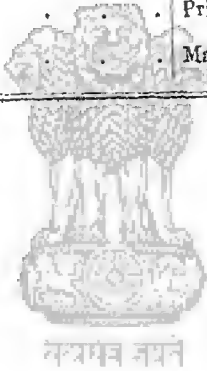
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INDIAN HEMP DRUGS COMMISSION.

EVIDENCE OF CENTRAL PROVINCES WITNESSES.

1. Evidence of MR. J. W. NEILL, *Judicial Commissioner, Central Provinces.*

25. The only one of these drugs that is largely consumed in the Central Provinces is ganja. It is not easy to prove that the consumption of ganja is on the increase, but I certainly believe that to be the fact. I am free to admit that my own personal inquiries on the subject have been limited, and that I have not perhaps been in a position to acquire information at first hand, but many circumstances appear to me to point to the fact that the use of ganja has acquired a greater vogue.

It is known that the use of ganja has always been common among the general labouring population of many, if not all, our districts, more particularly perhaps those districts of which the population is largely made up of the descendants of immigrants from Northern India; and it is also known that the same classes or many of them that use ganja also drink country spirit, but it is far from easy to make an estimate of the numbers who take ganja or of those who both smoke ganja and drink spirit. Equally difficult is it to estimate the annual consumption of ganja in the province. In 1878 the Commissioner of Excise, Mr. Nicholls, thought the consumption of the province would not be much over 5,000 maunds. This must have been a ludicrous over-estimate if only taxed ganja is now consumed. It serves to show, however, how little was really known about the matter.

In 1882 the Commissioner of Excise, Mr. Anderson, again said: "Still we have much to learn as to the actual quantity of the drug which the people consume."

And in 1884 the same Commissioner said: "With our present knowledge it is really impossible to estimate with anything like certainty the probable yearly consumption of ganja in this province." I am not aware that since then the information acquired is such as would enable the Commissioner of Excise to express any confident opinion on the matter. This being so, it is easy to see that any opinion that the use of ganja is on the increase or decrease must be to a very large extent conjectural. I have said, however, that I believe it to be on the increase, and I will mention some of the reasons which make me think so.

In the first place, such is, I think, the general opinion among natives, not only amongst those who have become Europeanized and who have so readily learnt to damn the sins they have no mind to, and to wish for interference with the ways of their neighbours which are not their ways, but also among those who remain Hindus and Orientals, and refrain from passing any moral judgment on the indulgences of others.

Next, it will be seen from the information which the Provincial Excise Reports afford, that the quantity of ganja taxed, and which passes into consumption, has on the whole (allowing for apparent

fluctuations which can in a great degree be explained away) steadily and largely increased. In 1892-93 it was nearly double what it was ten years before. Of course this may be ascribed wholly or in part to taxed ganja taking the place of untaxed ganja, and I readily grant that ganja could be easily smuggled into many districts from outside, and that cultivators of the ganja-bearing plant might keep back part of the produce of their cultivation and surreptitiously sell it. Also that a few ganja plants might be grown in small plots by individuals to provide for their private consumption of the drug; and that as these practices were more and more successfully put down, ganja smokers would have to go to licensed vendors for their supply, and the quantity of taxed ganja sold would increase without any corresponding real increase of consumption. All this I freely concede. But it appears to me that if it was only that taxed ganja was substituted for untaxed and illicitly obtained ganja, the great increase would have shown itself in the earlier years after cultivation of the ganja-bearing plant was placed under restriction, imports watched, and all illicit cultivation severely punished. But such is not really the case. The steady and regular increase set in some six or seven years later, and it seems to be accepted that smuggling to a considerable extent still continues. I think, therefore, that figures which can be relied upon show that there has been some real increase of consumption, and this increase is greater than the increase in the population.

Thirdly, I would draw attention to the fact that this increase of consumption has occurred, although the retail price of ganja is about five times as great as it was before the direct taxation of the drug and the restriction of cultivation in 1875-76.

Fourthly, it would not be surprising—would indeed be only what might be expected—if persons who both smoke ganja and drink country spirit, or if those who will have some kind of stimulant and have no prejudice against any one particular stimulant, and I think that among these one may reckon a large proportion of the labouring population, if these persons were, I say, to take more to ganja smoking, because the price at which alone it can be sold placed the other ordinary stimulant, country spirit, beyond their reach. Now, it is undoubtedly the case that country spirit has been made dear, and that the policy pursued has been to raise the price as much as possible, or at any rate the policy of limiting the number of places of manufacture, taking as high a still-head duty as possible. Discouraging by our system the brewing of weak liquor and maintaining monopolies and restrictions of all sorts has had that effect. Compared with ganja, even at the present retail selling rates, the price of liquor is high, and while persons who drink

country spirit have to take it at the shop like a dram unless they can afford to carry away a full bottle, which will cost them two annas and often more, the ganja smoker can buy his pice worth at any time, carry it about with him, and smoke it when and where he likes. It would not be strange then if many should take to ganja smoking, who would, under other circumstances, drink country spirit. Whether this is the case as a matter of fact is disputed.

Some officers and a late Commissioner of Excise have asserted that ganja smokers and spirit drinkers are separate classes, and that there is little cause to fear that a man of the former class will abandon spirit and take to ganja, but in 1877 there was an inquiry made into this matter, and Mr. Nicholls, the then Commissioner of Excise, summed up the reports received, saying it was generally thought, and it was an opinion which he himself shared, that ganja was being more widely consumed owing to the high price of opium and country spirits; and after continuing his enquiries for another year he said he had obtained incontestable evidence that the past extreme cheapness of ganja had resulted in a very great increase of consumption, and a year later again he reported that, except in Betul, in the upland districts, the Gonds and poorer classes had substituted cheap ganja for dear country spirit. It is true that since then the retail price of ganja has greatly risen; but even allowing for this, the disproportion of the cost is still very great.

Lastly, I should not be at all surprised if the efforts Government has made to raise a revenue by taxing the drug to control the cultivation of the ganja-bearing plant and to limit the consumption of ganja had in another way led to some increased consumption by making the drug better known and by making some people think that the drug is a luxury, and that a luxury that must be paid for or that is forbidden must be worth having, very much as school-boys will indulge in tobacco-smoking, not because they like it, but because it is forbidden. And to this it may be added that the quality of the ganja supplied has, owing to the interference of Government, been greatly improved, which may very well have led persons to use it who would not have done so before.

The above are the reasons which led me to think that the consumption of ganja is on the increase.

35. I do not think it would be feasible to prohibit the use of ganja. It might be possible to prevent consumption by prohibiting the cultivation of the ganja-bearing plant all over India, but that could not be done, that is to say the prevention of the use of ganja, without causing serious discontent, which, I am persuaded, would amount to a political danger. Ganja is much used by religious mendicants and others of that class, and it would be quite in their power to get up among a discontented people an agitation against the Government. While, however, the discontent would necessarily follow the prohibition of the use of ganja, it is almost certain that those who were deprived of this stimulant would promptly turn to another, and if not to alcohol, turn to other drugs—dhatūra and so forth. "You may oil a dog's tail as much as you please, it will still remain curly," says the Sanskrit proverb. You may prohibit the use of this or that stimulant, but while human nature craves for a stimulant, it will find one somewhere, and the danger is lest Government, by proscribing the use of ganja, should drive people to some

more deleterious stimulant. It is difficult to say which of the two objections to prohibition of the use of this drug is the stronger, but I may be pardoned for saying that the present time, when the rupee question (the closing of the mints) may yet be found to produce political difficulties which it will not be easy for Government to overcome; when it may be impossible to avoid further taxation; when the Commission on the morality of the opium traffic is unsettling men's minds; when religious animosities have been revived; when the action of Government in relation to these animosities has been misconstrued, and the Government is even by men who are undoubtedly loyal at heart blamed for bringing them to life, is not opportune for any direct and drastic interference with the habits of the people.

41. I do not know that the use of ganja is beneficial as a food accessory or digestive, but it is generally admitted, and I think there can be no question of the fact, that it gives staying-power under severe exertion or exposure, and that it alleviates fatigue. Many of the labouring classes and persons like palki-bearers who have to undergo great exertion use ganja because it stimulates them, gives them a filip for any hard work, and secures them a thorough rest after a hard day's work, and such persons may be said to use the drug habitually in a moderate manner.

45. I am not aware that the habitual moderate use of ganja produces any noxious effect, either physical, mental, or moral.

I have no doubt that many idle, immoral, and debauched persons are ganja smokers, but I do not know that it was the use of ganja that made them idle, immoral, or debauched; and compared with the great number of moderate ganja smokers, the number of these disreputable persons is extremely small, so that to lay the blame of their disreputable character on ganja would seem unreasonable. I have seen in lunatic asylums a good many individuals who were said by the officers in charge of the asylums to be the victims of ganja, and some of these persons were cured after a time and discharged. But if ganja was the cause of their temporary insanity, it is strange that the same person was not again and again received in the asylum, for on discharge he would in all probability return to his old habits; it is hardly credible that his wish for ganja would have been destroyed or that his self-control would have become so strengthened. Other lunatics were also returned as victims of ganja, but in most cases in our asylums the cause of insanity is not really traced, and very little of the previous history of the lunatic can be ascertained. Even were it found, however, that the use of ganja was the immediate cause of a man becoming insane, the fact would not suffice to condemn the moderate use of the drug, and I do not know that any attempt has ever been made to compare the number of lunatics whose insanity is traceable to ganja with the number of ganja smokers. Religious mania is far from an uncommon form of insanity, and yet no one would condemn religion on that account.

51. I am not able to say whether any large proportion of bad characters are habitual moderate consumers of ganja or whether they are excessive consumers. Bad characters are more generally associated with the madak shop than with mere ganja smoking, which is done anywhere; but apart from this, I would say that it would be difficult, if not impossible, to establish any connection between ganja smoking and crime. My

experience has not shown me that even excessive indulgence in ganja incites to unpremeditated crime, violent or otherwise, nor do I remember any case in which it has led to temporary homicidal frenzy, or, except one case of dacoity in the Saugor district, where habitual or professional criminals have fortified themselves to commit a premeditated crime; but I think it extremely likely that a person, not an ordinary criminal, but one who had determined to do a desperate deed, might nerve himself to the act by smoking ganja; and I think I can recollect a case of that kind in the Bhandara district, where four Muhammadans of desperate character, but not ordinary criminals, defied the police for long in a house in which they had made themselves strong, and finally, after murdering their women, who willingly consented thereto, broke out and escaped, only to be captured some days later. These men had, I believe, fortified themselves with ganja, but it was not the ganja that impelled them to commit the crime. In all my experience I cannot at present recall one single case in which a state of ganja intoxication was the real cause of the crime, while I could cite a whole catalogue of murders the result of drunkenness.

Since the above was written, another case has come before me, in which a man charged with the murder of his wife asserted that he knew nothing of the matter: he had been smoking ganja, and for days knew nothing of what happened. This was proved to be wholly untrue, and I merely mention the matter as showing how often drugs are said to be the cause of crime when there is absolutely no foundation for the statement.

55. I do not remember any case in which mere ganja was used by criminals to stupefy their vic-

tims. Dhatura is of common use for their purpose. It is not always possible in such cases to ascertain what was used.

58. I think the present system of Excise Administration in respect of hemp drugs is working well. It has been gradually elaborated, and is now well understood. Does not give more trouble than any system of strict control that can easily be conceived, and brings in a very considerable revenue. Some of the best officers in the province have at one time or another in the last dozen years held the office of Commissioner of Excise, and they have done their best to establish a good working system. I cannot say that I have been able to give that minute examination to the details of the system that would enable me to point out small blots or weaknesses, but that will not be expected from me, nor am I prepared to suggest that the present rates of duty should be enhanced or reduced.

In spite of my belief that the use of ganja is on the increase, I am not prepared to say that it would be better that more alcohol should be consumed and less ganja. I do not think that the information collected up to date warrants us in dogmatizing on the matter. The other questions in this chapter have either been answered inferentially in answers already given, or do not require an answer from me. But I would like to say in conclusion that I think in the case of a drug so generally consumed as ganja the system of taxation and of control should be, if not uniform for all provinces, yet on somewhat the same lines, and that the tax should fall, if not at the same rate, still at such rates that there should be no great temptation to smuggle from one part of British India into another.

2. Evidence of COLONEL M. M. BOWIE, Commissioner, Nerbudda Division.

1. I have been in the Central Provinces Commission since 1864, and have been Assistant and Deputy Commissioner, Inspector General of Police and Jails, and finally Commissioner. My name will be found also among those who have held the appointment of Commissioner of Excise, but I never took up this appointment, and I have never had any special opportunities of obtaining information regarding hemp drugs, and have not given the subject any particular attention.

2. I have never heard of charas being used by the people of this province, nor have I seen it. I believe that both the bhang and ganja here used are obtained from the cultivated plant, and I am not aware that the different kinds of ganja noted in the question are generally known in this province.

7. In this province the hemp plant is now cultivated in the Nimar district only. The cultivation elsewhere has been prohibited. In Nimar it is cultivated for the production of both ganja and bhang. I have never heard of charas being produced there.

16. Bhang is, I am informed, invariably prepared by the people in their own houses.

19. As far as I know, ganja is used only for smoking.

20. Ganja-smokers will, I believe, be found among all classes of the people, but it is the labouring classes that chiefly consume it. As to the proportion of the people who consume ganja,

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I fear I cannot give reliable information. In the village in which I am now encamped, Lokurtalai, in the Hoshungabad district, there are 909 inhabitants, and the contractor tells me he has eight regular customers.

21. The people say they use the ganja supplied by the contractor, and the contractor informs me that this is the flat ganja.

23. I am informed that bhang is never used for smoking in this part of the country.

24. Here bhang is chiefly drunk by the bunnia class and most of all by the Marwaris who take it during the hot weather as a cooling drink (thandai). In Sumbalpur the brahmins, I know, use it in the same way, and I believe its use is common among brahmins in other parts of the province also.

A preparation of bhang called majun is eaten by all classes in small quantities on the occasion of some festivals.

25. I know no reason for supposing that the use of any of these drugs is on the increase, and people say that the consumption of ganja has much decreased since restrictions were placed on the cultivation and sale of this drug.

26. I do not know of any class that habitually consumes bhang, and the occasional consumers I believe to be always moderate consumers. With regard to ganja, I would say that most of the consumers are probably habitual moderate consumers, though there are also a large number

of occasional moderate consumers. The number of occasional excessive consumers must, however, be very small.

27. The habitual moderate consumers of ganja are, I believe, mostly men who have hard bodily labour, such as palki-bearers, hamals, etc. The ordinary cultivating classes are also often habitual consumers, but among all these classes there are often men who only smoke ganja occasionally, *i.e.*, when they have had a hard day's work. The habitual excessive consumers are chiefly religious mendicants, who use it, I believe, because they have nothing else to do.

29. Ordinarily, ganja is, I am informed, smoked with an admixture of tobacco only, but gosains and other religious mendicants, who are almost invariably excessive ganja consumers, are said frequently to add dhatura in order to increase the intoxicating effects.

30. Both bhang and ganja are generally consumed by the people in their own houses, and I am not aware that company is sought for in the consumption of either. Bhang as "thandai" is, I believe, used by females also, but I have never heard that females smoke ganja. It is not usual for children to consume either bhang or ganja.

33. Public opinion is certainly not against the drinking of bhang, and no disrepute whatever attaches to it. I can remember some of my Marwari friends in Nagpur recommending it to me as an excellent cooling drink in the hot weather and offering to bring me some. Similarly, I think that there is no public opinion against the moderate use of ganja, though there is with regard to the excessive use of it. Except in the case of religious mendicants, an ordinary person who uses ganja to excess is generally lazy and useless, and falls into disrepute in consequence.

34. I believe that to persons accustomed to drink bhang in the hot weather, it would be a serious privation to forego the consumption, and any illness they might subsequently contract would most certainly be ascribed to this cause. Similarly, I think that to men who have to undergo severe bodily labour, it would be a very serious privation indeed if they could not get their accustomed pipe of ganja.

35. I do not think it would be feasible to prohibit the use of either bhang or ganja. The drugs would most certainly be consumed illicitly, and the prohibition would cause most serious discontent among the consumers; such discontent would, I have no doubt, be a political danger. The chief consumers are religious mendicants, and the question would be sure to be made a religious one, and no one can say to what this would lead. The prohibition, if it could be enforced, would be followed by recourse to other drugs in the first instance, and then probably to alcoholic stimulants.

36. I do not think that there is any reason to suppose that alcohol is being substituted for bhang or ganja in these provinces.

40. I have been told by the people that formerly they used to use bhang pretty freely in the treatment of cattle and horses; but that now that the price is so much increased they very seldom do so.

41. Those who use bhang certainly believe that it is beneficial in its effects, being cooling and acting also as a digestive. Similarly, those who use ganja say that it gives staying power under severe exertion and alleviates fatigue. The belief

is also very prevalent that it is of use to ward off malaria. The people tell me that they use it when they have to go to jungle tracts where the water is bad. I refer here to the moderate occasional use of the drugs.

43. Absolutely as far as I can learn.

44. The immediate effect of bhang is said to be cooling and refreshing, and it also gives appetite. Ganja smoking is also said to create appetite, to remove the feeling of fatigue, and to allay hunger.

45. I have no reason to suppose that the habitual use in moderation of either bhang or ganja produces any injurious effects whatever. No instances of this have come under my own observation. I have of course frequently heard District Superintendents of Police describe men as being idle and useless because they were addicted to the use of drugs; but I do not remember that District Superintendents have ever told me that this was the result of ganja smoking alone; and I am inclined to think that they seldom, if ever, take the trouble to distinguish the effects of different forms of drugs. Besides this, the men thus reported to me as being idle and useless were all excessive consumers, and it is also open to doubt whether in many cases at least they were not idle and useless before they took to drugs. Since the question has been before me, I have seen and spoken to a good many moderate consumers among the general population; and there was nothing whatever in their appearance or talk to distinguish them from non-consumers.

I can call to mind many instances in which Police officers have been dismissed for neglect of duty owing to indulgence in alcohol; but not a single case in which this was owing to ganja smoking.

As regards insanity, I would say that the popular belief certainly is that the excessive use of ganja does produce insanity, and in some cases in which the insanity was purely temporary, and which came under my observation in our lunatic asylums, ganja smoking certainly appeared to be the exciting cause of the insanity; but I have always myself been inclined to doubt whether ganja smoking will of itself produce insanity, and whether in most cases at least there may not be some previously existing brain disease which has led to the excessive indulgence in ganja. It is always very difficult, and often absolutely impossible, to obtain any really reliable information as to the previous history of the insanes brought to the asylums; and I cannot myself remember a case in which it was clearly shown that it was ganja smoking alone which led to insanity. I am clearly of opinion that the question of the use of the drug by persons suffering from mental anxiety and brain disease has not been sufficiently considered when ganja smoking has been alleged as the cause of insanity.

51. I do not believe that any large proportion of bad characters are habitual consumers of either bhang or ganja, and I do not consider that the moderate use of these drugs has any connection whatever with crime of any kind.

52. I hold the same opinions in regard to the excessive use of these drugs.

53. I cannot call to mind any instance of the excessive indulgence in either bhang or ganja having incited to the commission of crime of any kind having come under my own observation; nor have I been able to learn of any case of the kind from the officials in the Hoshungabad district whom I have been able to question on the point, except one case which Inspector Mahummud Taki

tells me he has already brought to the notice of the Commission. This he tells me was a case in which a head constable and some constables after a debauch in bhang had a fight in which some of them were severely wounded. Without knowing the exact details of this case I would not like to express any opinion regarding it; but from the fact that it is the only case of the kind that I have been able to hear of, I may, I think, safely conclude that such cases are very rare indeed; and with regard to this particular case, I would say that it is a matter of surprise to me that the exciting cause should have been bhang and not ganja. As far as I have been able to learn, bhang is very seldom used as an intoxicant. I have of course frequently read of men running amok under the influence of bhang or ganja, but I do not think that any attempt has been made in these cases to distinguish the particular drug the men had used; nor do I remember a case in which it was clearly established that any drug at all had been used. I can call to mind a great many cases which I have had to deal with as a Magistrate and as a Sessions Judge, in which serious hurt and homicide had been caused by persons under the influence of alcohol, but not a single case of crime of any kind which had been committed under the influence of bhang or ganja. With regard to the cases of

hurt, etc., which I disposed of as a Magistrate, it is possible that my memory may be at fault, but this is not probable in regard to the cases of homicide which I have disposed of as Sessions Judge.

54. I have heard it said, or perhaps rather seen it written, that people committing violent crime had previously fortified themselves with ganja, but no case of the kind has ever come under my observation, or been reported to me as far as I can recollect.

55. I do not remember a case of the kind coming under my own observation, but I have heard of cases in which ganja has been used as the vehicle for the administration of dhatura. I do not believe that complete stupefaction can be induced by ganja alone.

58. I have only got a general knowledge of the system of excise in respect to drugs in these provinces, and believe that it is working well.

60. I consider that under the system in force in these provinces the cultivation of the ganja-bearing plant and the process of its cultivation are sufficiently controlled; and I believe that if any further restriction were placed on cultivation, it would lead to a great deal of smuggling from the neighbouring Native States.

3. Evidence of MR. F. C. ANDERSON, *Officiating Commissioner, Nagpur.*

1. As Commissioner of Excise in 1882-85.

2. Charas is hardly known in the Central Provinces. What is generally sold are—

- (1) ganja as defined in margin (question 2) !
- (2) foreign bhang imported !
- (3) local bhang, the leaves, etc., which separate in handling from the local ganja (kali) sold by retail vendors.

I have never seen round ganja. What is called "refuse ganja" in the Central Provinces are the pieces of twigs, etc., which are separated out in the process of cleaning before the ganja is issued for sale. Refuse ganja is destroyed. I have never heard the term "chur" applied to ganja sold in the Central Provinces. It seems hardly correct to call it a separate variety of ganja; at all events it is not known as such in the Central Provinces.

7. The plant is cultivated for the production of ganja in the Nimar district. Its cultivation elsewhere is prohibited. So far as I know, its cultivation has been for the most part suppressed in all feudatory States except Bustar.

8. The cultivation (under license) in Nimar varies with the demand for ganja at the Khandwa Government Storehouse.

10. I have never heard of their forming a special class, either formerly when the cultivation was not closely restricted and controlled, or at the present time.

13. When the present Central Provinces system was introduced, cultivation was restricted to the Nimar district and the Katol tahsil of the Nagpur district, because it was only in these two localities that cultivation was other than scattered. Cultivation in Katol was stopped three years ago, the area under cultivation in that tahsil being small, and operations for controlling cultivation

and the issue of the drug were concentrated in Nimar and the Khandwa Storehouse.

15. Ganja is smoked. Foreign bhang is used for the manufacture of a cooling drink (thandhai), and also for the preparation of majum (a sweetmeat). Local bhang is similarly used. These decoctions from bhang are believed to take away the effect of fatigue and also to be cooling to the system.

18. Ganja deteriorates. It is generally supposed to keep good with ordinary care for about two years. Excessive heat and moisture hasten the deterioration, and rats play havoc with it if they get the chance.

19. Ganja is used only for smoking in the Central Provinces. Charas is so rarely used that it may be left out of account.

20. It cannot be said that ganja smoking is limited to certain classes, though its use is most common among the labouring classes and hairagis, fakirs, and gosains.

21. Only flat ganja is used in the Central Provinces.

23. Neither foreign nor local bhang are used for smoking.

24. The drink made from foreign bhang is generally used by Marwaris, but is not confined to this class; it is used by the better classes. The similar drink made from local bhang is used by the lower classes.

Majum is chiefly consumed at the Holi. Its consumption is not limited to any particular classes. It is eaten, being a sweetmeat. The total consumption of foreign and local bhang in the Central Provinces is small. Local bhang is given in a ball to cattle after hard work.

25. I have no sufficient data on which to base an opinion.

26. *Ganja smoking*.—The large majority are habitual moderate consumers.

I do not think that people smoke ganja occasionally either in moderation or excess. The eating of majum is occasional, chiefly at the Holi and at marriages and festivals. The consumption of drinks prepared with bhang is also occasional, chiefly in the hot weather.

27. The habitual moderate ganja smokers belong chiefly to the labouring classes. A man of this class generally confines himself to one pipe after his evening meal as a solace. The habitual excessive ganja smokers are chiefly bairagis, gosains, and fakirs.

28. I should think—

(a) about $\frac{1}{4}$ of a tola or less, worth about a pice;

(b) about a tola or less, worth about one anna.

29. Ganja is generally smoked with tobacco; dhatura is sometimes added in order to produce a greater intoxicating effect, but only by the viciously inclined.

In the drink prepared with bhang, cucumber seeds, ginger, etc., are mixed in order to make it more "tasty."

I do not know the term "bhang massala."

30. Two or three generally join company over a pipe of ganja. Ganja smoking is confined, so far as I know, to the male sex. I have never heard of children consuming any of these drugs.

31. I think the habit of ganja smoking is easily formed, and that when formed it is seldom abandoned. I do not think there is any appreciable tendency of the kind suggested.

32. Majum is generally consumed during the Holi festival. Bhang is drunk at the Shivratri; its use is deemed necessary, I have been told, to help the consumers over the day of fasting. The use of majum and bhang on such occasions or at marriages, etc., is generally temperate; nor have I heard that it develops into habit.

33. A certain amount of disrepute attaches to ganja smoking, due, I think, to the fact that some smoke in excess, and that excessive smoking is known to be deleterious. The objection is not religious, and is moral rather than social, for a man is not put out of caste for smoking ganja. It is not so much an offence against society as against the consumer's own bodily and mental welfare.

I am not aware that any disrepute attaches to the drinking of bhang.

I have not heard of the custom of worshipping the plant, but Mahadeo is said to have smoked ganja and drunk bhang, and I have been told that bairagis invoke Mahadeo before having their pipe. When I asked a man in the lunatic asylum about Mahadeo the other day, he opened out wonderfully.

35. (a) I think not.

(b) Yes.

(c) Yes.

(d) Such discontent might certainly develop into political danger if the flame were fanned by mischief-makers. There is no saying to what the action of Government in prohibiting it might be attributed.

36. No reason that I know of.

43. Yes.

44. *Ganja smoking*.—A man of the labouring classes will tell you it produces a feeling of satisfaction, perhaps exhilaration, and alleviates fatigue after the labours of the day.

51, 52 and 53. The moderate use of ganja (smoking) has no necessary connection with crime of any kind, but its excessive use may lead to the commission of crimes of violence by reason of the mental derangement produced.

54. No case of the kind has come under my notice in my magisterial experience.

58. No improvement on the existing system suggests itself to me.

60. I think it is sufficiently controlled in the Central Provinces Khalsa.

63. I have none.

64. No.

65. I do not think any alteration is required at the present time, or until it is shown that consumption is decidedly on the increase; or that a higher tax can be imposed without fear of inducing illicit cultivation and smuggling.

67. No.

68. Consumption on the premises is prohibited in the Central Provinces.

69. I believe that any objections made always receive consideration, and I think this is proper.

70. I am not very familiar with the latest developments in this respect, but I believe that smuggling from the feudatory States of the Central Provinces has very greatly diminished. The Central Provinces are exposed to smuggling from the Native States on the North-Eastern and Western borders, also from the Tributary Mahals and the Chota Nagpur States under the Bengal Government. Some of our districts, particularly Wardha, are also exposed to smuggling from Berar. There can be no doubt, however, that during the past ten or twelve years great progress has been made in the Central Provinces in the substitution of the taxed for the untaxed drug.

Oral evidence.

Question 22.—When I was Excise Commissioner, the consumption of charas was so small that it was not thought worth while to give licenses for selling it.

Question 29.—My answer is founded on general information. A man in the lunatic asylum informed me the other day that he smoked dhatura with his ganja. I do not remember his caste. I do not think he was a bairagi or devotee.

Question 35.—The principal difficulty of prohibiting the hemp drugs would be the impossibility of stamping out cultivation. Prohibition of cultivation would check consumption; but the drug would be procured by illicit cultivation and smuggling from over the border. There would be risk of political trouble from total prohibition of the drugs; but I would not regard that risk as serious. The people would be driven to the next cheaper stimulant if they were deprived of ganja; that would be liquor. Liquor is cheaper where the excise arrangements are managed on the outstill system. I look upon liquor, as consumed by the labouring classes in these provinces, as innocuous. The risk to which I referred above would not be appreciable if restriction took the form of raising the duty only. I cannot suggest

any improvement of the system of control over the hemp drugs; but the duties might be raised gradually if the hemp drugs are shown to be deleterious. In saying that liquor is innocuous, I mean that the weak liquor consumed in the Nagpur district is harmless. And, on the as-

sumption that hemp drugs are deleterious, I should regard the change of habit from hemp drugs to liquor as beneficial.

Question 33.—There are castes, such as Dhimas, among whom the hemp drugs are not at all in disrepute.

4. *Evidence of MR. L. K. LAURIE, Officiating Secretary to the Chief Commissioner, General Department.*

2. Yes. But the 'flat' variety is what is known as "ganja" in these provinces; and our "bhang" is the leaves of the cultivated plant.

7. (a) Yes. In Nimar.

13. Yes. To Nimar.

14. Ganja and bhang.

16. No. A coarse kind of bhang could be so prepared. Ganja is the product of cultivated female hemp plants, the male plant being carefully destroyed.

18. Ganja certainly does: and bhang, too, I believe.

35. Quite feasible to prohibit the use; but difficult to enforce the prohibition effectively. There would be a certain amount of discontent created. Considering that Hindu ascetics—and also, I believe, Muhammadan fakirs—are reported to consume ganja, the discontent might amount to a political danger, if our repressive measures proved thoroughly effective. But they would probably fail to suppress the use of ganja, which would be illicitly cultivated.

41. I have been told that this is one of the uses of ganja; and that it is given with this object to horses or ponies when a trying journey is to be performed with speed and endurance.

58. I consider it to be working well: and am not prepared to make any suggestion for its improvement.

60. I do not think that the system requires modification.

62. I am not aware that any such measure is called for.

63. None.

64. None.

68. No. See conditions of retail license.

69. If any objections are preferred, these are considered. But in an agricultural province like this, the people are not given to formulating their views in speech or writing; and "public opinion" can only be arrived at by laborious research.

Further note put in by Mr. Laurie.

I have been asked to give my views as to—

- (1) The extent to which hemp drugs are used in the Central Provinces, with incidental reference to question No. 25 as to whether consumption is on the increase.
- (2) The moral and physical effects which they have on the people generally with incidental reference to questions 41 and 45.
- (3) The connection of the consumption of the drugs with crime (questions 51 to 55).
- (4) The necessity for further restriction or for prohibition, and generally for any change in system (question 35, and chapter VII) regarding Administration.

My opinion on each of these points is as follows:—

(1) The quantity of ganja annually retailed in the Central Provinces (including feudatories and zamindaries) is, taking the average of the last five years, 1,282 maunds, equal to 51,280 seers. Now, the quantity of ganja which a moderate consumer takes daily is believed to be about $\frac{1}{4}$ tola (worth about 6 pie) per diem = $9\frac{1}{4}$ tolas, or about $1\frac{1}{2}$ seers per annum. If all the consumers of ganja in the Central Provinces were moderate consumers, then an annual consumption of 51,280 seers would mean between 45,000 and 46,000 ganja smokers. As some are excessive consumers, the number of persons annually using ganja issued from licensed shops would seem to be below 45,000. But it is not likely that the labouring classes, who form the bulk of the consumers, can afford to buy 6 pie worth daily all the year round. If they smoke only *one day in ten*, the total number of consumers of taxed ganja is still below half a million out of a total population of over 13 millions, or less than 4 per cent.

I am not able, of course, to say how much smuggled ganja is consumed; but I have no reason to suppose that the quantity is large in the province generally. It *used* to be considerable in Chhattisgarh before the railway was opened, and before we insisted on the ganja contractor offering good ganja for sale, in order to oust the competition of untaxed ganja from beyond our borders. My general conclusion is that the quantity of ganja consumed in the Central Provinces is small.

As to bhang, the quantity sold is inconsiderable, averaging 12 maunds (about) annually. The chief consumers are well-to-do Marwaris. Charas, so far as I know, is not consumed in the Central Provinces. Although the returns for the last five years show an increase in the quantity of taxed ganja sold, an examination of the district figures reveals that the increase is almost wholly due to the ousting of smuggled ganja by taxed ganja from the Khandwa warehouse in the eastern district—Chhattisgarh and Bhandara (with Balaghat). In ten districts consumption (as evidenced by sales) has either declined or has only increased to a small extent (corresponding, it may be, to the increase in population). The consumption of bhang is fairly constant.

(2) With regard to the moral and physical effects of the consumption of ganja, it is difficult to speak with accuracy and without having had a ganja smoker (certainly ascertained to be such) under observation for a series of years. Most ganja-smokers belong to the labouring classes, and could not indulge in a drug which unfitted them for earning their daily wage. I have been told by natives of this country that ganja gives staying-power and alleviates fatigue; but I have not personally verified this assertion. From my

observation of persons whom I have had reason to believe to be ganja smokers, I am under the impression that its effect is to produce mental torpor or drowsiness for an hour or a couple of hours after consumption, but the effect quickly passes off and no evil results seem to follow. Moderate smokers are, to the best of my knowledge, inoffensive persons, and in no way quarrelsome. I have never met a case of a man whom an excess of ganja had excited to passion or crime; but I have known superintendents of lunatic asylums describe the abuse of ganja as a cause of insanity; and as their records of causes of insanity are based upon enquiries made of the patients' relatives, it may be that ganja is popularly believed to produce madness, if taken in excess. This is not surprising, for if tobacco is indulged in unduly, it affects the nerves and nerve centres. My belief is that ganja consumed in moderation is not more unwholesome than very strong tobacco. I cannot enter into details as to the action of ganja on the digestion, on the bodily organs, and on the constitution generally, as my duties as Excise Commissioner did not directly lead me to a study of the pathology of the drug; and any statements on the subject which are not based on accurate observations, scientifically made and recorded, would be worse than useless.

(3) I have never traced any direct connection between ganja and crime. Criminals usually belong to the poorer classes; and as it is among these that ganja smokers are chiefly found, persons known to the Police as "bad characters" used often to be found at ganja shops before smoking on the premises was put a stop to. One of the objections urged to this measure was that the Police know where to look for bad characters at a certain hour, and so could ascertain if they were safe in the village or wandering abroad with criminal purpose. As ganja is, seemingly, stupefying to a certain extent, no criminal would consume it as a preparation for crime. He might use it to deaden conscience or fear, after the crime was committed. I have not known a case of ganja being used as a drug to stupefy the victims of crime. Dhatura is well known to be the poison

used for that purpose, and can be more readily administered. I do not think that complete stupefaction could be produced by ganja alone in a sufficiently short space of time for criminal purposes.

(4) Holding, as I do, that the consumption of ganja is limited and is, on the whole, innocuous, I see no necessity for prohibiting its cultivation or sales. I do not think it would bear much increase in taxation, as if it becomes too costly, the labourers will take to tari, or mohwa-spirit or some other stimulant. What is wanted is greater identity between the systems in force in different provinces and between these provinces and Berar, so as to decrease opportunities for smuggling, and to ensure our raising the highest possible revenue from the taxed drug. It is unnecessary for me to detail and compare the systems in force for taxing the drug in (a) the Central Provinces, (b) the Bombay presidency, (c) Berar, as an account of this is given in the printed memorandum on excise arrangements in respect to hemp drugs in the Central Provinces which is before the Commission; but it is well known that the free cultivation and low price of ganja in the Bombay Presidency is a source of danger to the revenue from taxed ganja in the Central Provinces and in Berar. Again, it is somewhat anomalous that our Khandwa godown should, without any official recognition of the fact beyond what is to be found in incidental correspondence, be the source of supply for the North-Western Provinces Government contractors. Till I obtained the Chief Commissioner's permission to levy a "Registration fee" on all ganja purchased at our godown, this institution existed (at our sole cost) more in the interests of the North-Western Provinces Government than in our own. Traders must procure the drug much more cheaply at Khandwa than elsewhere, or they would not incur the cost of transport by rail for so many miles. If the subject were gone into, a revised system of export or warehouse dues might be arranged. Part of the money now expended on carriage might come into the hands of Government under a system of provincial cultivation and provincial storehouses.

5. Evidence of MR. H. H. PRIEST, Secretary to the Chief Commissioner, Central Provinces, Revenue Department.

After a lengthened experience of all parts of these provinces in the course of which I had, both as Excise Commissioner and in other executive capacities, the amplest opportunities of ascertaining popular opinion, I have never heard a single complaint against the Government arrangements for the sale of ganja, nor have I ever heard any

reference to the prevalence or growth of the ganja habit as being due in any way to Government action.

From my experience in feudatory States, I should indeed be strongly inclined to the opinion that Government action has had a marked effect in checking the use of ganja.

6. Evidence of MR. A. C. DUFF, Deputy Commissioner, Jubbulpore.

1. I have acted twice as Provincial Commissioner of Excise for 3 and $4\frac{1}{2}$ months, and I was Deputy Commissioner of Nimar, the only district in which ganja is grown in the Central Provinces, for a year from April 1892 to April 1893.

2. I think not. As far as I know, ganja is only prepared in one way in these provinces. I know no special name for it. But I should judge it to be what is termed here flat ganja. I have never seen the drug being manufactured.

3. I know of none. I have no personal experience of this district, but I am told by the Settlement Officer, whose knowledge of this district is extensive and peculiar, that the hemp plant does not grow spontaneously here.

7. For ganja, yes.

Charas is entirely an imported product, and as far as my experience goes, bhang also.

The hemp plant is cultivated for ganja in the Khandwa tahsil of the Nimar district only.

8. The area under cultivation fluctuates, according to the character of the season and the prices ruling in the preceding year.

10. They are of the ordinary agricultural class.

13. *Vide* answer to question 7.

14. Ganja, yes, in the Khandwa Tahsil of the Nimar district as before stated. The amount of ganja brought to the godown in Khandwa yearly varies from about 6,000 to over 8,000 maunds. (I write from memory.)

18. If the drugs can be kept dry, they will keep good for a long time, say, two years.

19. Charas is, I believe, used only for smoking. Ganja is nearly always smoked, but some excessive consumers are said in rare instances to eat it.

20. The consumption of charas here is insignificant. Ganja is smoked by a large percentage of the labouring class and by fakirs and sadhus almost universally.

22. Foreign; imported from the North-Western Provinces.

23. I have never heard of this practice.

24. Bhang is drunk by nearly all Marwaris of the better sort, specially in the hot weather and in the larger towns.

25. The revenue realized from ganja is steadily increasing. But it is possible that this is due to more efficient control and diminished smuggling. Personally, my enquiries have led me to the belief that the use of ganja is not on the increase.

27. I should say that the great bulk of the labouring class are habitual moderate consumers, and the great bulk of the fakir and sadhu classes habitual excessive consumers.

28. $\frac{1}{4}$ of a tola . . . cost 3-6 pies.
1-2 tolas . . . cost 1-4 annas.

29. Tobacco is ordinarily mixed with ganja, and musk, cardamoms, dhatura, opium and betel-nut are sometimes also so used. Musk and cardamoms, for the fragrance they impart, and the others because they are believed to increase the intoxicating power.

30. Consumption is practised both in company and in solitude, and is not confined to the male sex or to any time of life. Children are sometimes given bhang by their elders as a treat.

32. It is the practice to drink bhang amongst Hindus at religious festivals, especially Nagpanchami and Sheoratri. I know of no social custom requiring the use of the drug.

33. No doubt respectable people do not like to have it said of them that they smoke ganja. There is not the same feeling in respect to bhang. I attribute the feeling about ganja to the fact that it is emphatically the luxury of the very poor, and that, therefore, the criminal classes are generally addicted to it. I never heard of any worship of the hemp plant.

34. I imagine persons who habitually consume the drug would suffer severely from its abrupt discontinuance.

35. Ganja is the only drug which is consumed in these provinces to an extent worth considering. It would be feasible to prohibit its use, but such prohibition would undoubtedly be followed by extensive smuggling. Serious discontent would be caused, but the aggrieved parties would be chiefly of the silent class, and the class with least powers of resistance. So perhaps it would be an exaggeration to call such discontent a political danger. Still everything which harasses and worries the lower classes to any large extent tends to aggravate any political danger which may arise. I should expect an increased consumption of opium (*vide* answer to question 36).

36. I think not. We are raising the price of our liquor in many places, and it is already very expensive in comparison with drugs.

40. I am informed by native doctors that ganja is prescribed for bronchitis and asthma. I am not aware that any of these drugs are used in cattle disease.

41. This is rather a question for a medical man than a layman. But the people believe that the moderate habitual use of the drug (ganja) acts as indicated in (a) and (b).

42. I cannot say.

43. I think they are.

45. No case has come under my personal notice in which the use of ganja, moderate or excessive, has produced any of the noxious effects recited.

51. I think the first part of this question must be answered in the affirmative. I don't believe that people are bad characters because they smoke ganja. But bad characters are generally people who are keen on getting as much pleasure out of life as they can, and ganja being cheap, they go in extensively for that.

53. I have never known personally of such a case.

54. I have never had this fact proved in evidence before me.

55. I think this is occasionally done. I can remember two or three instances during the time I have been a Magistrate in which I was satisfied that the victim had been drugged with ganja. But in no case was stupefaction produced to the best of my recollection.

58. I think it works well.

60. Quite sufficiently.

63. No.

64. No.

65. Yes.

67. No.

68. No.

69. Any local representation is, and ought to be, considered, but it is not solicited.

70. There is smuggling of course, and always will be, until the retail price of hemp drugs in Native States is assimilated to the price in British territory. But it is not I believe extensive and it is decreasing.

7. Evidence of MR. B. ROBERTSON, Deputy Commissioner, Nimar.

1. The subject is one to which I had paid very little attention prior to the appointment of the Commission. I have been about six months in Nimar, during which time I have had a good deal of correspondence about ganja administration, especially in connection with the store-house at

Khandwa; but before receiving these questions, I knew little about the cultivation of the ganja plant or the uses of the drug. The answers given are the result of recent local enquiry.

2. Charas is practically unknown in the Central Provinces.

Bhang is not prepared locally, but is imported from Northern India. A little used to be formerly imported from Central India, but the import is now said to have ceased, the quality being inferior.

Ganja. Only flat ganja is produced in Nimar. It has no separate name.

3. I do not know of my own knowledge of hemp growing wild in the Central Provinces. It is not found in this state in Nimar. At least I have met nobody who has ever seen or heard of the wild plant in this district.

7, 8, and 9. See memorandum* on the cultivation of the hemp plant in Nimar.

10. No. They are the same as the ordinary cultivators—Gujars, Kunbis, and the like. The growth of the plant is certainly not considered in any way derogatory in Nimar, as I think Prain remarks is the case in Bengal.

11. No.

13. The cultivation of the hemp plant is now confined to the Khandwa tahsil of the Nimar district. It seems to have been established here before we took over the country. In Burhampur the cultivators are said to be ignorant of the cultivation of ganja. For conditions of soil, etc., see reply to questions 7, 8 and 9.

14. Ganja alone prepared locally. Charas is practically unknown, and bhang imported. Ganja is prepared only in the Khandwa tahsil. Extent of ganja manufacture is treated of in a separate memorandum.

15. See separate memorandum.

16. Bhang is never prepared by the people.

17. The cultivators of the hemp plant prepare ganja. It leaves their hands substantially as it is smoked, except that the "kali" (the dried flower) still adheres to the stalk. The former is picked in the storehouse at Khandwa, and then despatched to different places for consumption.

18. Ganja does deteriorate by keeping. It is best when fresh, but keeps fairly well up to two years, after which period its strength goes. I can assign no special reason for this except the process of age.

19. As far as I can learn, ganja is almost entirely used for smoking. But it is also occasionally—from all accounts—very seldom made into majum, a confection into which various ingredients, butter, sugar, etc., enter. Majum is usually prepared from bhang, but people who want a stronger preparation sometimes use ganja for the purpose.

20. Ganja is used by all consumers of the drug, except those who use bhang (see question 24). In other words, ganja is the form in which the drug is used by the lower and labouring classes, while the better classes take bhang. I am unable to say what proportion of the people use ganja.

21. Only flat ganja is known here.

23. Its use for smoking is not known here.

24. Bhang is used by the better classes, more especially by Marwaris, Gujaratis, and people from Northern India. It is commonly drunk. In the hot weather particularly it is used in liquid form. In the cold season it is frequently eaten with "massala" of various kinds. Condiments also enter into the composition of the emulsion which is made with bhang. It is mainly the season of the year which determines whether bhang is taken in liquid or in solid form. The

use of the drug in one or other of these modes is not confined to any particular class.

25. I have no information on the subject. The printed excise reports are the sole authority to which I could refer.

26 and 27. I am unable to give information on this subject.

28. Habitual excessive consumers of ganja smoke more than 5 tolas of the drug per diem. One of my informants told me he would smoke a quarter of a seer could his means afford. As the habitual excessive consumer is frequently a man of limited means, often leading a hand-to-mouth existence, his consumption is generally limited in comparison with his desire for the drug.

The bazar rate is half a tola for an anna. Habitual moderate consumers take about half or one tola a day, costing from 1 to 2 annas.

29. Ganja is almost always smoked with tobacco. But see answer to question 19 as to its being sometimes prepared as majum. This is very uncommon.

Bhang is used with cardamoms, cloves, black pepper, almonds, melon seeds, and various other spices. The only reason for this is to make the compound palatable and tasty. Occasionally copper coins are boiled in an emulsion of bhang. This is said to increase the intoxicating power of the drug. I have no information as to the use of dhatura with bhang.

30. Ganja smokers certainly prefer to smoke in company. The use of ganja is mainly confined to the male sex, but women, and especially prostitutes, occasionally consume the drug. Children do not smoke ganja. The habit is acquired, much like tobacco smoking, when the youth wishes to be considered a man.

31. The habit of ganja smoking is easily formed, and is difficult to break off. There is, as far as I can make out, little, if any, tendency for the moderate habit to develop into the excessive. This I have found to be the general opinion of the moderate smokers I have seen. The expense of the excessive habit is besides a great prohibitive.

32. I know of none in connection with ganja. It is, however, usual for bhang to be indulged in by all classes, slightly of course, at the time of the Holi festival, as an accompaniment of the general merriment that takes place.

33. I think there can be no doubt that the consumption both of ganja and of bhang is regarded as lowering, but I should not say that public opinion is very pronounced on the subject. There is little doubt that consumption—of ganja; there is not the same concealment about bhang—to some extent takes place in private among the upper classes, showing that they would consider it disreputable to be publicly considered addicted to the drug. Among the lower classes, though the habit of ganja smoking can hardly be said to be looked upon with repute, there is little sentiment about the matter either one way or the other.

I can account for the consumption of ganja being looked down upon only on the grounds that it is intoxicant in its effects, and that it is specially the poor man's drug. There is not the same prejudice among the upper classes against the use of bhang as there is against ganja smoking.

34. If the ganja supply is stopped, there would be an outcry among almost all classes of consumers. As the great proportion of consumers

are habitual, they would miss their daily pipe, and would consider themselves aggrieved in consequence.

35. (a) I think not.

(b) It would certainly be illicitly consumed in Nimar, as the smuggling of ganja from Holkar's territory would be a comparatively easy matter.

(c) I do not see how it could be enforced without carefully watching our borders.

(d) The prohibition would, moreover, be largely productive of discontent.

(e) I do not consider that the discontent would amount to a political danger.

(f) The prohibition of the drug would almost certainly be followed by recourse to alcoholic stimulants.

36. I am unable to give any information on this subject.

40. The dried leaves of the ganja plant are given to bullocks, but not for medicinal purposes. They are mixed with grain, and given simply as food.

41. I can only rely for my information on enquiries made from a number of ganja smokers, who distinctly aver that the use of the drug is beneficial as a digestive; it gives staying-power, and is useful as a febrifuge. Some of the railway *hamals* told me that they nearly all smoked ganja to help them to carry heavy burdens and undergo fatigue. The use of ganja as a febrifuge is distinctly believed in in this district. Mendicants take to ganja smoking to ward off the ill-effects of exposure and cold, and because of its sedative effects.

42. I can only give an opinion founded on very limited enquiry, but I should say that the moderate use of ganja is in no way harmful. Judging from some specimens of men who had smoked ganja moderately for years, I consider them as fit and healthy as they could be. They have certainly suffered no harm from the consumption of the drug.

43. Quite inoffensive.

44. The chief result of a pipe of ganja appears to be refreshment. Its effect is instantaneous, and lasts for two or three hours. No bad after-effects are felt. It does not produce intoxication. It is said to create appetite.

45. I prefer to leave this and the next question alone as being more the province of a medical man. As I have already stated (question 42) the moderate use of ganja I consider to be entirely harmless and to have no more evil effects than the use of tobacco. This is the unanimous opinion of the moderate smokers whom I have spoken to.

47. No, so far as I have been able to ascertain.

48. No.

49. Ganja, the drug commonly consumed in this part of the country, is not used as an aphrodisiac. Prostitutes nearly all smoke ganja, but not for the above purpose. Ganja smoking does not produce impotence.

51 to 54. I am not qualified to speak on the subject, as I have never sought in ganja smoking an inducement to commit crime. The only case specially brought under my notice during five years' magisterial work is one that occurred recently in Burhanpur. A Muhammadan, who was subject

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to mental aberrations said to be due to over-indulgence in ganja, on two occasions was arrested for breach of the peace. The police considered him a lunatic, but his fit was soon over, and he was sent back to his people. Surgeon-Major Quayle knows the case. I have asked him to note on the matter in the answers to these questions submitted by him.

56. The only admixture of which I am cognizant is that of bhang, and very occasionally ganja, with spices and condiments in the form of a refreshing drink or of majum. The only reason given for the admixture is to make the compound pleasant to the taste. The boiling of copper in an emulsion of bhang is said to increase its intoxicating effects. I have been unable to get information as to the admixture of dhatura with bhang or ganja.

57. Ganja is almost invariably smoked. If eaten, as it sometimes is, it gives a greater effect than bhang; but it will not produce the same effect as when smoked.

58. I am not in a position to offer any criticism on the ganja administration of the province. My knowledge of it extends to only one year's experience, and during this time I have had to pick up the threads of such a number of subjects in the general administration that I have paid no attention to the special subject of ganja, its taxation, and control. I shall therefore pass only a remark or two on one or two of the points raised.

60. The law of supply and demand alone determines the extent of cultivation of the ganja plant in Nimar. Licenses for cultivation are given to as many cultivators as apply. A temporary establishment is maintained at Government expense when the crop ripens to supervise the cutting of the crop and the preparation of the pressed ganja. From enquiry I find that the control is considered sufficient, and that there have been no complaints against the system.

63. I have no remarks to offer as to the general system.

A correspondence is at present going on regarding the system of purchase of ganja at Khandwa by the agents of the wholesale vendors. The system is briefly this. The agents buy up the ganja on their own account as a speculation, frequently while the crop is standing. The whole outturn thus passes into the hands of about a dozen men, who are then able to run up the price at the Khandwa storehouse to all except the wholesale vendors by whom they have been specially retained. *Example*: "A is the agent of B, a wholesale vendor. A buys up 400 maunds of ganja on his own account. Out of this he can always supply B at a reasonable rate; but if an outside vendor, say from another province, sends to Khandwa for ganja, he has to pay a *corner* price as A is in league with the other Khandwa agents, and all have combined to raise the price." The existence of the *corner* in no way affects the vend of ganja, as far as this province is concerned. The wholesale vendors have to supply the retail vendors at Rs. 3 per seer, so that the latter, and through them the consumers, are not affected. But wholesale vendors from other provinces undoubtedly find it difficult to make purchases at Khandwa.

65. I have no remarks to offer.

68. The consumption of ganja on shop premises is forbidden in the Central Provinces.

69. The choice of locality for a shop rests usually with the authorities. In the present state

of public opinion no measures are necessary in this respect.

70. Ganja smuggling from the Native States which border on Nimar, though it no doubt exists, has never been a prominent matter in Nimar. While opium smuggling cases are of daily occur-

rence, ganja smuggling is almost unknown to the courts. It is the general opinion, however, that a good deal of petty smuggling exists, and this is probably correct when it is considered that ganja is sold in Indore territory at about $\frac{1}{10}$ th the price in the British districts.

8. Evidence of KHAN BAHADUR AULAD HUSSEIN, C.I.E., Assistant Commissioner and Settlement Officer, Jabalpur.

Oral evidence.

Question 1.—I have been 49½ years in Government service. I have served in all divisions of the province. I was engaged in the first land settlement of the province 30 years ago, and am engaged in the present revision.

Question 13.—Formerly, when the matter was not looked after so carefully, it was the practice to cultivate the hemp plant in yards of houses. I do not find such cultivation now, and I am in the habit of visiting houses, and in a position to see such cultivation if it exists. I consider that the restriction is effectual. The cases of evasion are extremely rare.

Question 20.—The drugs are principally used by Hindus, cultivators, and others of the lower classes; by Lodhis among the higher classes, because their habits are similar to those of the people of Bundelkhand; and by Bairagis and other religious devotees. Among Lodhis the proportion of consumers would be about 10 per cent. I cannot give the proportion of consumers among the labouring classes; but the habit is not general. I can't say in what district the habit is most prevalent; but it will probably be found to be more prevalent in the districts bordering on Bundelkhand, where the plant is freely cultivated and used.

Question 25.—The consumption is less now than it was formerly, when we could not estimate what the consumption was. That is my decided opinion. The decrease is due to the restrictions which have been imposed and resulted in raising the price of the drugs. I cannot say that there is any tendency to increase now. I cannot claim very intimate acquaintance with the subject. It

has not been pressed upon my notice. I have found that people were not in a condition to reply to questions put in course of business through their being in liquor, but I have never experienced the same difficulty on account of ganja. I have never met with a case of a man being intoxicated with ganja.

Question 35.—If cultivation of the hemp plant in the Nimar district and the sale of the drugs were prohibited, the use of the drugs would not be entirely stopped. It would be smuggled from over the border. The restriction would cause distress among the people who use the drugs to alleviate their toil.

Question 45.—I cannot make any statement regarding the effects of the drugs, as I have not had opportunities of observing them in particular cases. The subject has not forced itself upon my notice. I disapprove of the general use of intoxicants of all kinds; nor do I consider that intoxicants are necessary to any class. But the people themselves do consider them necessary under the circumstances of their lives. I cannot mention any class, all members of which abstain from every kind of intoxicant.

Question 59.—I do not think the duties are too low; but I think the number of shops might be reduced. I am not prepared to indicate in what districts that change should be made; but if restriction is desirable, it should take that form. If the people had to go very far for their drug, it might be necessary to allow them to keep a week's supply for personal consumption in their possession. I have no suggestion to make regarding change of the present excise arrangements, which I consider satisfactory, since they do not tend to encourage increased consumption of the drugs.

9. Evidence of MR. H. V. DRAKE-BROCKMAN, Officiating Commissioner of Excise, Central Provinces.

1. I have been officiating as Commissioner of Excise since April 1892. For reasons which need not be detailed here I was unable to do much marching last open season, and so have had comparatively few opportunities of gaining information at first hand as to the consumption of ganja and bhang in rural areas.

2. The only narcotic obtained from hemp in the Central Provinces is ganja as defined by Dr. Prain. At harvest-time resinous matter, which is probably identical with "charas," exudes, and sticks to the hands of the reapers who cut down the plants; but this is not separately collected. The narcotic "bhang" is imported from Gwalior and the North-Western Provinces, and is locally known as "pardesi bhang." What is locally termed "desi bhang" is the refuse rejected when the ganja manufactured

by cultivators and stored in the Government godown is cleaned for issue to wholesale vendors. The word "bhang" applied to this refuse seems to be derived from the Sanskrit root meaning "broken," and so to be almost identical with the ordinary signification of the word "chur." But chur as a kind of ganja is not produced in the Central Provinces; I notice in this connection that according to Dr. Prain the quantity of chur obtained from flat ganja in Bengal is infinitesimally small, and as only flat ganja is manufactured here, this probably accounts for chur being locally unknown.

The ganja raised in the Central Provinces, as well as that from Indore, is known in Upper India as "pattar," a word the etymology and primary signification of which I have not been able to discover.

3. Enquiry on these points has recently been made by all Deputy Commissioners, and I believe from their reports that the hemp plant does not grow spontaneously in any part of these provinces.

4. "Ganja" appears to be the only name by which the plant is known, and it is applied indifferently to the plant and to the narcotic produced from it.

5 and 6. Hemp does not grow wild in the Central Provinces, so I need not attempt to answer these questions.

7. Hemp is cultivated for the production of ganja and ganja seed only, and cultivation has been restricted to the Khandwa tahsil of the Nimar district since the close of the year 1889-90. The average area under cultivation during the past three years is 705 acres, and the average amount of outturn of the manufactured article, 6,865 maunds. The raising of ganja for seed is confined to a few villages.

8. Statistics of area cultivated and quantity stored for each of the past five years are as under for the Nimar district :—

	Aeres.	Maunds.
1888-89	858	9,450
1889-90	954	10,854
1890-91	521	7,224
1891-92	653	6,685
1892-93	940	6,686

The fall in 1890-91 was due to the market being overstocked with the large outturn of the previous year, and to the raiyats having unsuccessfully combined to resist dealers' low prices; in 1891-92 the losses which had been sustained in this way and excess rainfall prevented any considerable extension of operations, besides damaging the crop raised on the area worked. In the latter year, however, cultivators realized high prices, averaging Rs. 8 per maund, and were encouraged to sow more ganja in 1892-93; but the crop raised was again damaged by excessive rain, and the quality was generally inferior. It may be mentioned here that consumption in the Central Provinces themselves has little, if any, effect on the area cultivated, for the reason that only about one-fifth of the crop is consumed locally: during the past five years local consumption has increased from 1,123 to 1,468 maunds, the annual average being 1,282 maunds.

In 1888-89 and 1889-90 there was a little cultivation in the Katol tahsil of the Nagpur district; in the former year 79 acres produced 377 maunds, the corresponding figures for the latter year being 39 acres and 312 maunds.

9. I have described the method of cultivation in a separate memorandum,* copy of which has been furnished to the Secretary, Hemp Drugs Commission. The memorandum was drawn up under the Chief Commissioner's orders in accordance with the Commission's letter No. 33, dated the 11th August last.

10. There is no special class of hemp cultivators in Nimar, nor was there in Nagpur when cultivation was permitted there.

11. No. In Nimar the best ganja is raised from seed obtained at Dhakalgaon in Indore, and the rest from seed furnished by a few villages within the districts which cultivate ganja specially for this purpose.

12. No.

13. Cultivation of the hemp plant for ganja is restricted to the Khandwa tahsil of the Nimar

district. Going back as far as 1871-72, the first year for which a separate Report on Excise Revenue was issued, I find that ganja was then grown in all districts in small patches, but that even then the Nimar district and the Katol tahsil of the Nagpur district were the chief seats of cultivation.

By Central Provinces Gazette Notification No. 610, dated the 16th February 1882, cultivation was definitely restricted to the Katol and Khandwa tahsils. Since the year 1889-90 there has been no cultivation in the Katol tahsil. The reasons for selecting Nimar as the sole source of supply were chiefly these :—

- (1) the Katol ganja was inferior, and consequently little in demand;
- (2) the amount raised in Khandwa was far in excess of provincial requirements, and would certainly suffice to meet them even in a year of bad harvest.

The only special condition which I can mention as necessary for the production of ganja is moderate rainfall. For a good crop manuring and irrigation should be resorted to: in Nimar the first is never, and the second very seldom omitted. The kind of natural soil required is one which does not retain water close to the surface, and so clog the plant with mud. So much I have been able to ascertain by local enquiry; and if my information is trustworthy, there is no difficulty in understanding why the Khandwa tahsil has always been a favourite field for cultivation. The peculiar physical advantages enjoyed by that tahsil are as follows :—

- (1) the average rainfall is only 33 inches per annum, *i.e.*, less than that of any other district in the provinces;
- (2) the water-bearing stratum is in most parts within 20 feet of the surface;
- (3) at the same time the surface soil rapidly loses the monsoon fall by self-drainage.

Great advantages of another kind are that ganja has been cultivated for generations, and that the value of manure has always been thoroughly appreciated.

Ganja has at one time or another been raised in every district of the provinces, and so far as I am aware, its cultivation cannot be said to be impossible in any part.

14. As the hemp plant is grown for ganja only, so ganja is the only product manufactured, and manufacture, like cultivation, is restricted to the Khandwa tahsil of the Nimar district. The entire crop, when manufactured, must be deposited in the Government storehouse at Khandwa: the amount deposited in each of the past three years is as under :—

	Maunds.
1890-91	7,224
1891-92	6,685
1892-93	6,686

About $\frac{1}{3}$ of the quantity stored is lost in cleaning when the drug is prepared for issue to the double-lock stores of wholesale vendors in the different districts. A further cleaning is effected when the drug is issued by tahsildars to wholesale vendors for sale to retail vendors, and this further reduces the quantity to about 45 per cent. of that originally stored at Khandwa.

15. I have described the process of manufacture of ganja in the memorandum to which reference was made in my answer to question 9.

* Published in Vol. III, Appendixes.

16. All the bhang consumed in the Central Provinces is imported from Gwalior and the North-West Provinces, as stated in my answer to Question 2: this narcotic is not locally prepared at all.

17. The classes who cultivate and the ordinary agricultural labourers do all the work required. The chief castes who are employed in cultivation generally are Kunbis and Gujars; next to them come Rajputs.

18. The person best qualified to answer this question is Jaitram Bijraj of Kampti, who has been selected to give evidence. There can be no doubt that both ganja and bhang deteriorate by keeping; the latter retains its power longer than the former, but two years seems to be the limit of time for which either can be kept in satisfactory condition. No special measures are taken in these provinces to prevent deterioration.

19. Charas is not consumed at all in the Central Provinces. Of ganja the only preparation in use for other than smoking purposes is majum, a sweetmeat of which the ingredients are (1) ghi, (2) that part of ganja known as desi bhang, (3) a syrup made of sugar and water. For the current year 24 shops have been licensed to sell this preparation, and the total demand on account of license fees is Rs. 854-4-0. The licensed shops are distributed as under:—

Permanent.		For Holi Festival.	
Nagpur	6	Jubbulpur	9
Hoshangabad	1	Saugor	3
Harda	1	Damoh	1
Pachmarhi	1	Narsinghpur	1
Seoni	1	Kandeli	1
Khandwa	1	Barwahan	1
Burhanpur	1	Chhindwara	1
Raipur	1	Gadarwara	1
		Mohpani	1
		Tendukhera	1
		Bilaspur	1

A dose of majum weighs $\frac{1}{4}$ tola, and can be had for 0-0-3: two of these doses is as much as any one can manage in one day. Very little is consumed at times other than the Holi festival.

20. There are no classes to whom the use of ganja is absolutely forbidden: smokers may be divided into the following main classes:—

- (1) Mendicants and devotees, both Hindu and Muhammadan;
- (2) Non-agricultural day-labourers of all classes; Agricultural day-labourers who do not belong to the regular cultivating classes;
- (4) A certain proportion of the well-to-do.

Cultivators as a rule eschew ganja. It may be said that all males of class (1) smoke, while for classes (2) and (3) one-half of the males over 19 years of age is not an extravagant estimate. Smoking of ganja by women is very uncommon.

21. "Pattar" ganja, the local product, is alone used, and this corresponds most nearly with the flat ganja of Bengal.

22. No shops are ever licensed to sell charas, and it is believed that none is consumed.

23. Bhang, locally known as pardesi bhang (see answer to question 2), is never smoked.

24. The chief consumers of bhang are Marwaris, some of whom drink it daily. In the hot weather the well-to-do of all except the cultivating classes take it, because it is cooling and refreshing. Bhang is never eaten. The Marwaris are bantias of the Oswal, Agarwal, Mahesri, and Jain sects.

25. With reference to this question I venture to invite perusal of paragraphs 31-33 of the Provincial Excise Report for 1892-93 and of paragraph 4 of the Chief Commissioner's Resolution thereon. The only districts of the Khalsa in which sales of ganja can be said to have steadily and alarmingly increased of late years are:—Bhandara, Balaghat, Damoh, Mandla, Raipur, Bilaspur and Sambulpur. The last three districts make up the Chhattisgarh Division, and it is safe to say that in them the increase is in no small measure due to the care taken by the Commissioner to prevent smuggling from and through the Feudatory States; another potent cause has been the extension of the Bengal Nagpur Railway. No special explanation which can be regarded as satisfactory is forthcoming from either Balaghat or Mandla: the cases of Bhandara and Damoh are dealt with in the Report to which reference has been invited. The Chief Commissioner has ordered further detailed inquiries to be made in each district, and the result of these will not be known till next hot weather.

Sales of bhang do not fluctuate much from year to year; they are *nil* in the districts of Chanda, Seoni, and Mandla, and practically so in Bhandara and Wardha. Most is sold where Marwaris are most numerous, *i.e.*, in Nagpur, Jubbulpur, Narsinghpur, Hoshangabad, Raipur and Bilaspur.

For facility of reference I append a statement* showing sales of (a) ganja, (b) bhang, in the Khalsa for each district during the past quinquennial period.

26. Taking the main classes of ganja-smokers given in the answer to Question 20—

- (1) mendicants and devotees are habitual *excessive* consumers;
- (2) and (3) day-labourers are habitual *moderate* consumers;
- (4) well-to-do smokers indulge, as a rule, occasionally, and then in moderation.

So far as I can make out from persons whom I have questioned, there are practically no occasional smokers who exceed.

With regard to bhang, I would class Marwaris as habitual moderate consumers, and other persons who use this preparation as *occasional* moderate consumers.

Looking to the total number of persons shown as "devotees," on pages 148—151 of the Central Provinces Census Tables, 1891, and taking one-half to be 20 or more, and therefore certainly ganja smokers, I estimate smokers of class (1) above at 20,000 in round numbers. My authority for assuming one-half to be under 20 years of age is the statement of age distribution given in paragraph 85 on page 90, Part I, of the Central Provinces Census Report, 1891. To estimate the number of smokers in other classes is much more difficult: all told, 800,000 is probably as high a figure as it would be safe to suggest.

Efforts will be made in the coming open season to obtain an approximately accurate census of ganja smokers of all classes.

27. This question has in effect been answered already. Bhang is a luxury for the well-to-do, and very little used.

Ganja is smoked by two main classes—

- (a) those who have to support themselves by daily labour involving great physical exertion;

* See Statistics in Vol. III, Appendices.

- (6) those who have adopted a wandering or isolated mode of life on religious or semi-religious grounds.

28. I believe the allowances to be :—

Consumers.	Ganja.	Bhang.
Habitual moderate.	$\frac{1}{2}$ tola, worth about 0-0-6.	$\frac{1}{2}$ tola, worth 0-0-6.
Habitual excessive.	3 tolas, worth 0-4-6 to 0-6-0.	No consumption.

29. Gauja is nearly always mixed with tobacco for smoking purposes, two parts of ganja to one of tobacco being the usual proportions. Ganja is always washed in water before smoking, and the tobacco is added after the water has been squeezed out as far as possible, in order to facilitate "drawing." The mixture is said to have a pleasanter taste and to be less powerfully intoxicant than plain ganja.

Dhatura is mixed with gauja only by excessive smokers, and they sometimes smoke the former plain. From replies to inquiries made by this office in 1882 I find that this use was in vogue before ganja came to be taxed at all. This mixture is far more intoxicating than plain ganja or than ganja and tobacco mixed.

It is not the practice in these provinces to sell "bhang massala": those who drink bhang mix the necessary ingredients at home themselves. For 5 tolas of bhang the quantities of the ingredients in common use would be:—1 tola black pepper, 20 almonds, 10 cardamoms, $\frac{1}{2}$ tola rose leaves, pounded 50 seeds of cucumber, $\frac{1}{2}$ tola aniseed, $\frac{1}{2}$ seer sugar, 2 seers water, $\frac{1}{2}$ seer milk.

30. Of the main classes of consumers mentioned in the answer to question 26, mendicants and devotees and well-to-do persons may prefer to smoke in solitude, but there is no necessity for being alone.

Labourers nearly always smoke in company, a "chilam" being passed round to each of 3 or 4 persons who take their puff or two in turn; four would find a chilam charged with half a tola of ganja and quarter of a tola of tobacco sufficient for a smoke in this way.

With the exception of some prostitutes, women do not smoke ganja at all; nor do children. The habit is contracted by males about the age of 19 years.

Bhang may be said to be, among the comparatively few who consume it, the social drink corresponding to the Anglo-Indian "peg:" women and children do not drink it.

31. This is a question I am hardly qualified to answer. Labourers whom I have inquired of say that they can manage to do their work well enough, even if they cannot get their usual smoke. In this respect there is a vast difference between consumers of ganja and consumers of opium: the latter are useless, unless they get their accustomed dose, and that at the accustomed time.

32. It is usual to drink bhang on the festival called Shivratri, which occurs early in February. Some of the concoction is poured over the "ling" in honour of the god. Even those who do not ordinarily drink bhang take a little on this occasion. I cannot give any useful information as to the effects of this custom but I have never heard that it is harmful in any way.

33. Most people whose position is superior to that of a labourer profess to look upon ganja smoking as a disreputable practice, and the name "ganjeri" is considered abusive. The use of bhang is for the most part confined to the hot weather, and its moderate consumption at that time is in no way deprecated: even Marwaris drink very little in the rains or cold weather.

The hemp plant is cultivated only in Nimar, and it is not worshipped there.

34. I certainly think that the labouring classes would suffer greatly, if they were entirely deprived of ganja; they can do more work when under its influence, and at the end of the day a pipe greatly alleviates their fatigue. Mendicants and devotees are constantly on the move, and would take care to supply themselves somehow, whatever we might do in the way of prohibiting or restricting consumption: if absolutely shut out from gauja, they would generally find dhatura easily obtainable.

Bhang is more or less a luxury, and there are not many who would suffer for long if deprived of it for good. The number of consumers must be well below 100,000, judging from the fact that half tola is the ordinary daily dose, and that retail sales for the past five years average only $11\frac{3}{4}$ maunds per annum. But it must be remembered that Marwaris travel a great deal between British and Native territory, and no doubt carry about bhang bought in the latter: as possession of any quantity up to 20 tolas, no matter where purchased, is legal, our statistics of sales cannot be regarded as a satisfactory gauge of consumption.

35. If the consumption of ganja is prohibited in the Central Provinces, the prohibition would have to be enforced by a large preventive establishment with special inquisitorial powers. Smuggling goes on now when possession of 5 tolas is legal and 1,000 retail shops are licensed yearly; so there can be no doubt as to what would happen if the drug was not procurable within the provinces. Smokers are not, however, so influential or numerous that their discontent could give cause for alarm for the permanence of our political supremacy; they would take to dhatura or kuchla, if smuggled ganja was not to be had. The present policy of the Local Administration is to raise the price of country liquor, and even now there is some reason to suspect that prices are so high as to drive consumers to the use of drugs. Opium is not likely to be appreciated as a substitute for ganja by consumers of the latter who are labourers, for the reason that opium does not produce an intoxication which brings inclination for physical exertion, but is rather of an opposite nature.

36. There is no tendency to drink liquor in preference to ganja smoking. On the other hand, fears are entertained by the administration that ganja is being substituted for liquor as an intoxicant (see answer to question 25.)

37. I can give no information about charas; it is not sold in the Central Provinces.

38. As already stated, only one kind of ganja is consumed here, and that corresponds most nearly with the "flat" ganja of Bengal.

39. Bhang is doubtless the least intoxicating of the preparations used in these provinces. Majum eating and ganja smoking produce pretty similar results in this respect, the intoxication caused by the latter being probably shorter-lived than that induced by the former. I am not prepared to

say that moderate indulgence in any one of these three preparations is injurious.

40. "Desi bhang" is said to be given to cattle in the cold weather to get them into good condition.

41 and 42. I am sure that the chief reason why labourers smoke ganja is that it helps them to undergo exertion and exposure, and also alleviates fatigue at the end of the day's work. I have questioned many, and they all described the effect of the drug consumed in this way to be as above.

Bhang is commonly said to sharpen the appetite, and ganja seems to produce a similar effect in a less marked degree.

43. Moderate consumers are quite inoffensive.

44. Ganja smoking produces at once an intoxication which lasts about two hours.

Bhang used merely as a refresher has very little intoxicating power. Neither ganja nor bhang allays hunger, but both, and particularly the former, sharpen the appetite.

So far as I have been able to ascertain, the consumer's condition, after intoxication has passed off, is perfectly normal, and there is no *craving* like that experienced by opium eaters or opium smokers.

45 to 48. These are questions to which I am unable to give satisfactory or useful answers.

49. If an aphrodisiac is, as I take it to be, a medicine which supplies sexual power or increases it when it is feeble, I do not believe that any preparation of hemp is regarded as an aphrodisiac. Kuchla or strychnos nux vomica is so regarded, and used accordingly.

50 to 54. I am not in a position to give any useful answers to these questions.

55 and 56. I understand that to induce stupefaction admixture of dhatura is necessary. I have met with no cases of such admixture, and my office files do not contain any special information in regard to it.

57. Ganja proper is never eaten. The preparation of majum has been briefly described above (in answer to question 19), and the intoxication induced by it is said to last longer than that caused by smoking ganja.

58 to 60. The system of control appears to me to be complete, and neither from personal experience nor from my office records can I bring forward any sound objections to it. Cultivation is only permitted under license, and that in a very limited area; harvesting is supervised by a special establishment entertained every year; the entire crop is stored in a Government godown, and the manufactured article is thence distributed to district storehouses, access to which is impossible in the absence of a tahsildar or naib-tahsildar. Payment of the direct duty of Rs. 2 per seer is ensured by only permitting the wholesale vendor to obtain a fresh supply after he has paid duty on the amount sold by him to retail vendors since the last previous issue. It is true that in 1887 Mr. L. K. Laurie, the then Commissioner of Excise, suggested the substitution of Government agents for wholesale vendors on the ground that all the wholesale vendor had to do was (1) to buy at the Central stores as much ganja as was from time to time required in the district for which he was appointed, and (2) to employ an agent at each tahsili to sell the drug to retail vendors. All Deputy Commissioners, except four approved of this suggestion, but Mr. Laurie on re-consideration concluded that Government

agency was unsuited for purchasing and for selling to retail vendors, and the Chief Commissioner accepted this view.

The right to sell by retail is always sold by auction, shops in towns being sold in a lump, and those in rural areas separately. Objection may perhaps be taken to auctioning such monopolies on the ground that bids made at auctions are often merely speculative or induced by other than purely business-like considerations. The obvious alternative is to fix the fee payable either separately for each shop or generally for each district or tahsil; and from paragraph 49 of the Excise Manual it will be seen that this may be done with the sanction of the Chief Commissioner. A system of monthly licenses at fixed rates was tried in 1880-81, but by 1882-83 was almost entirely abandoned: the objections to this form of tax were pointed out in paragraph 43 of the Provincial Excise Report for 1880-81. If yearly licenses were issued at fixed rates, those rates would in practice be settled with reference to the bids at recent auctions, for vendors are as a rule too illiterate to keep accounts, and it is practically impossible in most districts to gauge actual consumption owing to the state of the law which permits possession of 5 tolas of the drug no matter whence obtained. In this connection I would invite perusal of the remarks in paragraph 15 of the Chief Commissioner's Resolution on the Provincial Excise Report for 1880-81.

61 and 62. Neither charas nor bhang is cultivated or manufactured in the Central Provinces.

63. I have nothing to add to the answer given to questions 58 to 60.

64. If we are to protect ourselves completely by means of penalties against import of ganja, even in the quantity possession of which is legal (5 tolas), the Excise Act of 1881 must be amended. In 1879 the Chief Commissioner submitted to the Government of India a draft Bill on the lines of the Opium Act, 1878, one section of which permitted the import of intoxicating drugs prepared from hemp only when effected in accordance with rules to be issued by the Local Administration. But the Government of India appear to have considered that reduction of the quantity of ganja which a private person may have in his possession from 20 to 5 tolas was a sufficient safeguard against unlawful importation, for the Act of 1881 contains no direct prohibition of the import of ganja.

65 to 67. The incidences of total demand per head of total population in respect of country liquor, hemp drugs and opium, were respectively as under for the year 1892-93:—

R a. p.	R a. p.	R a. p.
0 2 10 .	0 0 5 .	0 1 0

No satisfactory comparison of these figures seems to me possible, because there are, besides non-consumers of either liquor or ganja, many who use one and not the other. If we could ascertain the exact number of consumers of each intoxicant, the incidences on them might be usefully compared. In my answer to question 26 the probable number of ganja smokers is estimated at 800,000; on this the incidence per head is 5 annas for 1892-93.

For country liquor I can only rely upon the estimate in paragraph 23 of the Provincial Excise Report for 1884-85, which gives the total number in drinking castes as 6,434,809; allowing for increase in population since the census of 1881, this may be increased to 7,000,000. If half this number are consumers, as they probably are, the

total revenue from country spirits for 1892-93 gives an incidence of 8 annas per consumer. Ganja being emphatically the poor man's intoxicant, I think these incidences are relatively proper. I am not in a position to estimate the incidence of opium revenue per consumer.

68. The consumption of opium, madak, ganja, bhang and majum on the premises of licensed vendors of those drugs was entirely prohibited in September 1890, and the prohibition has been in force since the 1st April 1891.

69. Hitherto the public have confined themselves

to objecting in a few instances to the location of liquor shops and stills. In this connection reference is invited to paragraph 9 of the Chief Commissioner's Resolution on the Excise Report for 1892-93, where it is recorded that in the Central Provinces no well-defined public opinion exists regarding excise questions.

70. The smuggling of hemp drugs is fully dealt with in the memorandum prepared in accordance with the request in paragraph 3 of the Commission's letter No. 28, dated the 11th August 1893, to the address of the Secretary to the Chief Commissioner, Central Provinces.

10. Evidence of Mr. F. G. SLY, Settlement Officer, Hoshangabad.

I have the honour to state that I and my assistants have made detailed enquiries during the present camping season regarding the extent to which cultivators use hemp drugs.

All the information collected tends to show that cultivators do not in this district use hemp drugs as a stimulant in seasons of hard work. Of course there is a very small percentage who use these drugs habitually throughout the year, but it is not on this point that the information was required. Some of the information collected by my assistants tends to show that a limited number of Gonds and Karkus do use hemp drugs during seasons of hard work, such as ploughing, sowing, etc. I myself have not yet inspected the hilly portions of Harda tahsil, where aborigines are numerous, and I cannot therefore confirm this statement from personal

enquiries. The information collected, however, tends to show that the use of hemp drugs as a stimulant to hard work is very limited indeed even amongst aborigines. These consumers state that its effect is to dispel fatigue, enliven the spirits, and induce appetite. The good cultivating castes say that they never use ganja or bhang as a stimulant to hard work, but that during the seasons of hard work they increase the quantity of their food and more particularly of ghee and milk.

Some few Mabhatta Brahman malguzars say that bhang is administered in small quantities to bullocks during the seasons of hard work; it is said to dispel fatigue and render bullocks capable of performing extra work. My enquiries tend to show that this practice is very limited.

11. Evidence of PURSHOTAM DASS, R. B., Settlement Officer, Wardha.

From enquiries made by my subordinates in this district while in camp, I am in a position to report that as a rule these drugs are not used by cultivators as a stimulant in seasons of hard work as a general rule. In villages situated near jungle, cultivators or labourers who have to stand the whole night in the open watching their fields to protect them against wild animals do sometimes smoke ganja which keeps them warm during the

cold nights of winter, but the drug is expensive and not easily procurable. I put the percentage of the cultivating classes using ganja at about 3 per cent., and with such persons the use of ganja becomes a habit. Very few indeed use these drugs as an occasional stimulant.

I regret that owing to adverse circumstances, I have not been able to send in this report until now.

12. Evidence of BHARGOW LAXMON GADGIT, Brahmin, Extra Assistant Commissioner, Nagpur.

1. I have been serving in the Revenue Department for thirty years. I have served in eight districts, and the information I have obtained is from matters coming before me officially, from inquiries made from the consumers of the drug, and from observations made by me from time to time.

2. There is only one kind of ganja (flat) known in this province. Charas is not collected.

Bhang is not grown for use in this province, but it is imported from North-Western Provinces. Definitions of these drugs as given in Dr. Prain's report on ganja may be accepted for this province.

The dry leaves and refuse of the ganja is also called bhang.

3. As far as I am aware, hemp plant does not grow spontaneously in any of the districts I have seen.

5. Wild hemp is not grown in this province.

7. Hemp plant is grown in the district of Nimar for the purpose of ganja and for seed.

The area under cultivation in 1892-93 was 940 acres.

8. The figures for the past five years are given below:—

	Acre.	Outturn deposited in store.
1888-89	940	9,826
1889-90	992	11,166
1890-91	520	7,224
1891-92	653	6,684
1892-93	940	6,685

The variations are according to the demand and crop of the year. There has not been any considerable increase or decrease.

9. The land generally selected is near Abadi. Rich black soil is not suited when the rains are heavy; a little hard soil is preferred. The land requires good manuring. Dung manure is preferred. The land before sowing is ploughed up three or four times to prevent any weeds getting root; sowing is made at the end of June. When seed begins to germinate, great care is taken to watch the field, otherwise birds destroy the seed when germinating. Weeding is done like ordinary cotton-fields. When plants are about six inches high, thinning goes on; where the plants are many they are uprooted; one span is left between each plant. When the plants are about two feet high, leaves are removed from plants one foot high from the ground. This is done to encourage the growth of the plants. Separation of male plants is the principal care; this is done to prevent the plants producing seed. The male plants are rooted out three times or even four times; this process goes on at an interval of 8 or 10 days—in the month of October generally. If there be no rain the plants are watered. This is done two or three times, and then the crop is ready for cutting, which commences in the beginning of November.

10. Hemp-growers do not form a separate class; ordinary cultivators grow it.

11. No.

13. Ganja cultivation is now restricted to Nimar.

14. Ganja is prepared from the hemp plant in the Nimar district. Charas is not collected, and its use is almost unknown. Bhang is imported from Rajputana (Marwar) and North-Western Provinces. Cultivation of the hemp plant for ganja is confined to about 100 villages in the Khandwa tahsil. The area under cultivation last year was 940 acres.

15. As I have said before, wild hemp is unknown here. The preparations for smoking, eating, and drinking are of the cultivated plant.

Ganja is used for smoking. Its process is very simple. The flower which the consumer obtains from the retail vendor is soaked in water and allowed to remain for some time. It is then washed, and, having been placed on a piece of cloth, the water is drained off. It is then placed in a *chilam* (native pipe). It is, however, mixed with tobacco.

Ganja is used in preparing majum. It is well boiled in ghee and its essence is extracted; then it is mixed with sugar, and when dried it is cut in cakes.

Bhang is used in drinking. It is the foreign bhang which is used. It is soaked in water and then well powdered on a flat stone. The several ingredients, to which I will refer further on, are powdered and mixed up with water. It is strained on a piece of cloth.

Bhang is imported from North-Western Provinces and Marwar. It is not locally manufactured from the plant.

17. Ganja for sale is prepared by the cultivators themselves.

18. Ganja keeps good with ordinary care for two years, and after that it loses its effect, as the flower gets dry and it becomes dusty. Bhang keeps good for four years.

19. Ganja is almost always used for smoking. Charas is almost unknown in this province.

20. Ganja smoking is not restricted to any particular caste.

The following classes generally smoke ganja:—

I.—Labourers, including dāk-runners, fishermen, palki-bearers, and agriculturists.

II.—Bairagis, gosains, fakirs, and other mendicants.

III.—A few of the better classes who have imbibed the habit as a luxury.

I am unable to give any percentage of the ganja smokers. Ganja smoking is not confined to any particular locality.

21. Flat ganja is only used in this province; others are unknown.

22. Charas is unknown. The only instance I am aware of was of illicit importation from the Punjab. It was in Narsingpur that this article was found with a contractor when his house was searched.

23. Bhang is not used for smoking.

24. Bhang is used for drinking purposes by Marwaris, better classes of Hindus from North-Western Provinces. The men of the province, well-to-do persons, also occasionally indulge in drinking bhang, and the lower classes of the people sometimes drink bhang. This is drunk on Hindu festivals (such as Holi and Shivaratri) and sometimes on marriage occasions. It is often when young friends meet in any garden they prepare and indulge in this drink. It is very difficult to give the proportion of the people drinking bhang, but from the quantity of bhang consumed as shown in the excise returns (13½ maunds last year), the number cannot be large. This quantity would suffice for one day's drink for about 175,000 persons.

25. The quantity of ganja sold has somewhat increased. It was 940 maunds in 1888-89, and it is now 1,194, and this would lead one to suppose that the use is on the increase. The province is surrounded by Native States where there are not such restrictions on the use of ganja, and there were many opportunities for smuggling of foreign ganja; but gradually these sources of illicit supply are on the decrease, and this accounts for the increase in the consumption of the locally-manufactured article.

The quantity of foreign bhang used has also increased from 10 maunds in 1888-89 to 13½ maunds in 1892-93. This increase is also slight. I have no reason to consider that the number of ganja smokers has to any appreciable extent increased.

26. Of the three classes mentioned by me in answer to question No. 20, the first or labouring class falls under class (a), habitual moderate consumers of ganja.

Class second I class as habitual excessive consumers, and third class as occasional moderate consumers. Those who use bhang as drink are occasional moderate consumers.

27. Habitual moderate consumers of ganja are the labouring classes. There is an impression that smoke of a chilam will take away the fatigue, and they generally smoke ganja to take away the fatigue. The habitual excessive smokers are the class of mendicants and fakirs whose wandering life makes them indifferent to the worldly affairs. They are often beggars, and as their wants are satisfied by the charitable public, they do not care what amount they spend. The life they lead is peculiar; they are idlers, and they associate with them such reckless characters that when they assemble and begin to smoke they go to excess; they thus form this habit of excessive smoking.

Their justification for their conduct, as they say, is that by excessive smoking they do not feel the effect of cold and rain; and bairagis say that it assists them in concentrating their thoughts in one direction, and they can practise "yoga" better under the influence of ganja.

The third class of occasional moderate consumers is formed of members of all classes. They indulge in smoking ganja. As a rule, such members are addicted to other vices, and ganja smoking is resorted to as an addition.

The classes who use bhang as a drink are generally well-to-do people. It is indulged in as a luxury; poorer people drink it as removing fatigue.

28. The average cost of ganja to an habitual moderate consumer of ganja is half an anna, and that to an excessive consumer is two annas daily, or even more.

29. In smoking ganja, tobacco is generally mixed. Dhatura is sometimes mixed. In the preparation of bhang for drinking, the articles ordinarily used are black pepper, sugar, water, and cucumber-seed, but specially the following articles are used: *dahi* (curd), milk, *sopa* (aniseed), *kankol* (eubebs), rose-flower, black cobweb, copper, and dhatura seed. The admixture of tobacco and dhatura with ganja is to give it a better taste and make it more intoxicating. The articles mentioned above are mixed with bhang when it is prepared for drink. These admixtures are to give good taste and to make it more intoxicating. Bhang massala is generally sold in the bazar; it consists of the articles described above as ordinarily used.

30. Habitual moderate consumers of ganja smoke alone, but habitual excessive consumers (fakirs and mendicants) and other occasional smokers of ganja smoke it in company; bhang drinkers generally drink it in company. Males generally use these drugs, but females and children of the mendicant class who follow them sometimes partake of the drug.

31. The habit of smoking ganja is not easily formed, but the habit of drinking of bhang is easily formed. Ganja-smoking cannot be easily given up. It is these moderate consumers who become in time excessive consumers by force of circumstances.

32. Ganja smokers and drinkers of bhang and the consumers of majum always offer it to the god "Shiva" in the first instance. It is generally believed that ganja and bhang were the favourite articles with Shiva, and before one partakes it is offered to the deity. On Shivaratri bhang is prepared for drinking, and it is first poured on the idol (Shiva) and then partaken by the consumer, who generally observes fast that day. In the Holi festival, majum and bhang drinking is indulged in by the well-to-do persons; and Marwaris and other well-to-do persons on marriage feasts and in the hot season in garden parties prepare bhang for drinking, and they indulge in the use of majum. It is not considered essential on Shivaratri, Holi, and on such festivals to have bhang and majum, but it has become a fashion, and the most orthodox portion consider it as essential. The use of these drugs on such occasions is moderate, and it is not injurious. There is no fear that such occasional use would lead to the formation of the habit.

33. The occasional moderate use of the drug, either in smoking, drinking, or eating, is not looked upon as vice, and it is not in disrepute. It

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is the excessive use that is in disrepute. An excessive smoker and excessive drinker have the contemptuous names of *ganjadi* and *bhangu* given to them, and it is this class that is looked down with hatred by all classes. Hemp plant is not worshipped.

34. As I have said before, the labouring and agriculturist class use the drug so as to give relief to them after the hard work they are used to do. To them and to the excessive smokers it would be a great hardship to forego the use. The number of such men is not very large. The total quantity of ganja consumed last year was 1,194 maunds, or in round numbers 1,200 maunds or 48,000 seers. A person who has a pipe of ganja in the morning and again in the evening consumes about $\frac{1}{4}$ of a tola, and at this rate his average yearly consumption would be one seer. If it were supposed that all were moderate daily consumers, the number for the whole province would be 48,000, but due allowance must be made for persons of the mendicant class who use this drug in large quantity. The number of persons using this drug cannot be more than 30,000, which to a population of over ten millions would give 3 per thousand.

35. If the use of this drug were prohibited, people would import it illicitly. I know of instances in Raipur, Jabalpur, Damoh, and other districts bordering on Native States, where, owing to high prices of this drug, they have recourse to illicit imports in small quantities. Prohibition would no doubt cause some discontent, but if it be general, then in time I am inclined to think the consumers would have recourse to other intoxicating drugs. I do not entertain the slightest fear that discontent caused by the prohibition would amount to political danger.

36. There is no reason to think that alcohol is now taking the place of this drug.

37. Charas is not used in this province, but those who have used it say that it is more intoxicating than ganja, and that the intoxication lasts longer.

40. I am not aware of ganja or bhang being given in medicine, but ganja is given to cattle along with "gur." This is given to them to take away the effects of fatigue on long journeys.

41. The moderate use of ganja consumers who use it in smoking use is to alleviate fatigue; it is also smoked to prevent disease in malarious and unhealthy tracts.

Bhang drinkers drink it as they say it digests food and it gives them good appetite.

Mendicants and others who are not excessive smokers take it as they say for preventing diseases from climatic influences, and some take it in order to concentrate their minds and enable them to practice "yoga" better. I do not consider moderate use of this drug is in any way injurious.

43. They are inoffensive.

44. I cannot say anything from experience, but from what I have observed I would state that persons drinking bhang feel somewhat intoxicated; some feel inclined to sleep. The same is the case with ganja smokers; sometimes they are inclined to be very talkative. The effect lasts from two to three hours, according to the quantity taken; and after the intoxication is gone they feel quite fresh. Bhang drinking creates appetite.

47. No.

51. Bad characters are not as a rule habitual moderate consumers of these drugs, but their

associations are such that they soon imbibe all the vices of their associates, and in time they take to the use of these drugs; but a large proportion of these men are not habitual consumers of this drug.

53. No.

54. No; but criminals take these drugs in order that they may not feel the after-effects. In case they have to run or undertake long journeys they do not feel the effects.

55. I have heard instances of criminals inducing their victims to partake of ganja or bhang, or even majum. The latter is given to children as it is sweet and they readily take it, and when they are somewhat intoxicated they are deprived of their ornaments. In giving ganja to smoke, dhatura is mixed to make it more intoxicating and make the victim insensible.

58. I do not advocate any improvement in the present system, which is working well: it has made the rates very high.

62. Bhang is not produced in this province. It is imported.

63. The only objection I have to offer is to the system of sale of foreign bhang. It is sold at tahsil head-quarters by the wholesale vendor. I do not see why he should not supply it to retail vendors like ganja, and they should be allowed to sell to the public. As the wholesale vendor sells it to the public, consumers get it cheaper at present than ganja.

68. The drugs are sold at the shop; these are consumed and prepared at the private houses. I do not consider it advisable to have shops or houses where the drugs should be used.

69. Wishes of the people are not consulted before any shop is opened. The sites are approved of by the Collector. The sale of the drug is not held in disrepute, and I do not consider it necessary to refer to the people for opinion before any shop is opened.

Oral evidence.

Question 11.—I stated the fact that ganja was grown from local seed. The wild plant was unknown, and its seed not used. I cannot say whether the seed of the wild plant would produce the cultivated kind.

Question 15.—It is the flower of the ganja which is used in preparing majum. I have actually seen it prepared. The foreign bhang is imported, but majum is not prepared from it in Narsinghpur. Here also (Nagpur), I was informed that the flower was used.

Question 24.—In this answer I am speaking of the foreign bhang. I have not heard of the local ganja being used for drinking, but I expect that it is. It would be in excess of the quantity I have given. According to my experience bhang is not habitually consumed, but occasionally. Bhang consumption is a luxury, and indulged in by foreigners for the most part.

Question 29.—The confirmed smokers only use dhatura to make the ganja more intoxicating. The bairagis principally indulge in this admixture. I do not think dhatura is mixed with bhang for drinking. My answer should be corrected in this respect. Dhatura should also be omitted from "bhang massala."

Question 30.—Bhang is drunk in company at festivals. Habitual bhang drinking is confined to foreigners from Benares and the North-Western Provinces.

Question 32.—I have enquired from pandits and have failed to learn that there is any religious authority for bhang drinking. But I have noticed that on certain religious occasions it is regularly used. An ordinary consumer would not always offer it to Shiva, but bairagis would not omit the invocation, and it would be necessary on religious occasions. In smoking also a bairagi would invoke Shiva, but labourers would not. In connection with festivals the drug is therefore essential. Nevertheless the prohibition of the drugs would not necessarily be an interference with religion, nor would it be regarded as such.

Question 34.—The proportion of consumers I have calculated in my reply is not, I think, below the truth. I have not noticed any increase of ganja smokers as I have of liquor drinkers, and I am constantly observing the habits of the people.

Question 55.—A case occurred in Narsinghpur in 1878 in which dhatura was given, but I do not remember the details of it. That is the only case I could call to mind. The victim was a smoker, and the object was ornament-stealing.

Question 58.—The price of ganja is, I think, 2 annas a tola. A man who only smokes two pipes a day has to spend half an anna, and I don't think the labourers who smoke ganja can afford more than that. I do not, however, think the rate is too high.

Question 59.—Personally I should like to see the duty raised. The ordinary wage is $2\frac{1}{2}$ annas, and the ganja smoker has therefore to spend one-fifth of his earnings on ganja. I consider that sufficiently high. I think liquor is quite as bad as ganja. I am talking of Raipur, Narsinghpur, Nagpur, and Jabalpur. I have no desire to see liquor take the place of ganja. The excessive use of liquor is, I think, more deleterious than the excessive use of ganja. Moderate use of both is harmless. I should prefer to see total abstinence all round, and would advocate raising of the rates to bring about that result.

Question 63.—I would like to see other retail vendors of bhang besides the wholesale vendors. I should like to see the superior foreign bhang take the place of the broken ganja, which is, I suspect, used as inferior bhang. The price would be higher, but the people would have a good article brought within their reach. The stuff now used as bhang is, I understand, very deleterious.

Question 69.—I have heard of no opposition being made to the opening of any shop.

13. Evidence of TRIMBAK RAO SATHE, Extra Assistant Commissioner, and Diwan of the Sonapur State.

1. As an Extra Assistant Commissioner in the Central Provinces, Khalsa, I visited licensed vendors' shops and had opportunities of talking on the subject generally with the vendors and people using drugs. Similarly, as Superintendent of the Patna Feudatory State and that of the

Kawardha Feudatory State together, for about $3\frac{1}{2}$ (three and-a-half) years, and latterly as Diwan in the Sonapur State, I had to enquire of such persons about the use of these drugs. Especially on receipt of these printed questions, I made the several matters contained therein as the subject

of my conversation with persons dealing in their trade as well as those using them.

2. The descriptions given in this question of round and flat ganja, as well as "chur," may be accepted for this State; people don't understand the term 'bhang,' nor do they observe distinction between patti or ganja. They manufacture liquid drink called "kúsúmba" used like "bhang" in other parts of the country, either from "patti" or "ganja." Charas is not used here, nor is it known what it is.

Round ganja is manufactured by the flower tops being tied with string in either plantain leaves or rengál leaves.

7. There was uncontrolled cultivation of the plant in the Sonapur State almost in every village before 1889 for the production of round ganja. It has been stopped since 1889 under Government orders, and ganja supplied by Government is used by the people. It is still cultivated in the adjoining Boad State.

8. There is considerable increase in the area under the cultivation of the plant in villages of the Boad State bordering the Sonapur State since 1889, because (1) it has not been allowed in the latter State, (2) it can be had cheaper than that supplied from the Government godowns, (3) people say that ganja manufactured from plants cultivated in the Boad State, which are similar to those cultivated before in Sonapur, is liked by them better than the flat ganja, which they think is more injurious to their health. They say that the use of the latter causes headache. This opinion of theirs about the quality of locally cultivated ganja, and the several instances of seizure of ganja smuggled from that State, shew that the demand for the Boad ganja must have increased. Formerly the Sonapur people did not care to get ganja from Boad as they cultivated similar ganja in their own house-yards. All excessive ganja smokers whom I questioned about this matter earnestly asked me to try to obtain permission to cultivate and supply the local ganja. This circumstance strengthens my belief that there is some increase in the area under ganja cultivation in the Boad State.

9. Ganja is cultivated in villages known to me, mostly in yards of houses of cultivators or in sugarcane fields. Its seed is thickly sown in richly manured plot like that of chilli or bhata, or tobacco, in the beginning of the rainy season. After the plants are grown about five or six inches high they are removed and planted in rows at a distance of a cubit from each other. The ground is made soft and well manured with cow-dung: sweepings of cattle or sheep shed are also mixed. Excessive moisture being injurious to the plants, high ground is selected so that water may not remain accumulated at the roots. They thrive better in house yards than in the sugarcane fields. At the end of the rainy season, when the plants are in flower, the male plants are removed: the distinguishing sign of the latter is the yellowish colour of their flowers, stems and leaves, while the colour of female plants is green. Leaves of the male plants are, however, separately dried and mixed with those of female plants, from which they are not then easily distinguished. The female plants are allowed to stand till they become ripe, when they are cut and dried. Then the dried leaves are removed and the flower tops are kept for a night in dew. The flower tops are then wrapped in leaves such as of Bengal plantain, etc., and tied with string or some fibre.

10. Persons who cultivate hemp do not belong to any special class but are of the same classes as

other agricultural cultivators, and in no case have I found the cultivation of hemp to be the chief source of a cultivator's living, like his grain fields or sugarcane plantation.

14. Only ganja is prepared in the adjoining State of Boad in the manner explained against question 9. The same drug is used as well as "patti" for making "bhang," called "kúsúmba."

16. "Bhang" or "kúsúmba" is always prepared by people in their houses. This drink is never sold in the market.

17. There is no religious nor social restriction as to the class of people. Anyone can prepare the drugs.

18. Ganja and "patti" deteriorate by being exposed to damp, and lose their effect in any case after a year, up to which they retain their effect if they are not exposed but kept in a dry state.

19. Ganja is used here both for smoking and preparing an intoxicating drink called "kúsúmba" (bhang). This is its general use, but I know one man who ate and chewed ganja just like tobacco, and people here have seen him eating at one sitting about one chhatak or five tolas of ganja.

21. Round ganja is preferred here for smoking.

23. Bhang is used for smoking in the absence of ganja, but not in preference to it.

24. All classes of people here, who are not allowed by their religion to take liquor, drink bhang ("kúsúmba") on the occasions of some social gatherings or religious festivals. In the course of my enquiry I found very few persons who said they did not taste this drink in their life.

25. It is on the decrease among the higher classes of people to whom the use of liquor has not been allowed owing to religious prejudices. Such prejudices are gradually dying away with the spread of the western thoughts, and alcoholic liquor is taking its place. The Hindu religion does not prohibit the use of ganja or bhang, and the people believe that their gods like the devotees taking these drugs, so that their use may enable them to concentrate and devote their minds to them.

26. The proportion of habitual excessive ganja smokers and "bhang" takers is small. Similarly, the proportion of habitual moderate consumers is small. But most of the classes who are not allowed the use of liquor are occasional consumers of "bhang."

27. In some religious institutions and social gatherings these drugs, ganja and bhang, are occasionally kept with the object of inducing people to attend them. And whoever attends such meetings is inclined to taste ganja or bhang by seeing others using the drug. In this part of the country I saw in several large villages religious places called "gudis" where occasionally in the year some Hindu mythological books, mostly "the Bhagwat," are read by priests and villagers who go there to hear them read in the evening. The priest is paid for his labour on the completion of the reading, which continues for several days, and the payment made by each person is generally in accordance with his regularity in attending the lectures. Those attending regularly pay larger sums than occasional visitors. So the promoters keep ganja, fire, etc., at the place to secure regular attendance of hearers. Such institutions initiate the habit of ganja smoking.

Among Brahmans and mahantis and such other higher classes, at the time of caste or religious festivals and feasts, bhang (kúsúmba) is prepared and given to the assembled guests before taking their food. It is usual for the host to ask or even to press every guest, if he were very familiar, to take it more and more, just as he does afterwards in the case of any delicious dish.

28. Habitual excessive consumers require about 2 to 3 tolas of ganja, worth about 2 annas, every day; whereas about the same quantity is consumed by habitual moderate consumers in a week. The former smoke ganja for about 20 or 30 times, and the latter twice or so in a day. As for bhang a habitual excessive consumer requires 5 tola patti or one tola ganja in a day. The same quantity is consumed by a habitual moderate consumer in five days or so. Persons taking the latter drug have some fixed time in a day for taking it, either in the morning or in the evening, but always before they take their food; whereas habitual, excessive ganja smokers have not got such times fixed. They smoke it at an interval of two hours the longest. While I was talking with such a consumer on one occasion for about three-quarters of an hour, after which signs of uneasiness became apparent in him, and on being asked he said that unless he smoked ganja he could not answer my questions. On this I asked him how long before he had taken it; he replied shortly before he appeared before me.

29. Ganja pure and simple is never smoked. Tobacco is always mixed with it, whether the consumer is a habitual, the excessive or a moderate smoker. Men of the latter class wash ganja clean first, but those of the former are not so particular about washing it. Three of the persons questioned by me admitted that they smoked the mixture of—(a) dhatura and ganja; (b) opium and ganja; (c) dried roots of paddy; (d) saliva of cobra; (e) kuchla (nux vomica); (f) nutmeg. These three men were habitual excessive consumers of ganja. I did not believe that it was possible to get saliva of poisonous snake, so questioned them to describe how they obtained it. They all stated that the mixture had been prepared by other men in their absence and they were only told that it was that mixture and then they smoked it. They said they found it much stronger than ganja mixed with tobacco. They said that the mixture of dhatura and ganja is the strongest of all the other mixtures mentioned. They use the mixture of these ingredients only occasionally: they increase the strength of the drug (ganja). The effect of the smoke of these mixtures lasts longer more or less than ganja mixed with tobacco. A person requiring to smoke ganja four or five times in a day is satisfied with smoking the dhatura mixture only once. These mixtures are used by only habitual excessive consumers. If it be taken by habitual moderate or occasional consumers, it will produce its injurious effect in them immediately.

There is no preparation such as "bhanga masala" either understood or sold in this part of the country, but if a bania be asked to supply "thandai masala" he will give (1) cloves, (2) poppy-seed, (3) pepper, (4) cardamon and such other flavourous articles, sonp, dry rose flower, cucumber seed, milk, sugar. "Bhang masala" known in Northern India contains these ingredients. Pepper is generally mixed: the mixture is called "ghota," used by habitual consumers (excessive or moderate). It is then ground fine. The finer it is ground the stronger its effect becomes. The other ingredients are

occasionally mixed. The other liquid prepared of bhang is called "thandai," which contains a less quantity of ganja than ghota.

30. Ganja smokers are not generally liked by people. So this drug is taken in the beginning in solitude or in a society of consumers. As for bhang it is taken in company. People don't seem to dislike it. They are taken mainly by men. There are some public women and those of ascetic classes who use these drugs, but their number must be very small.

31. The habit of consuming ganja or bhang is easily formed, and in the case of habitual excessive consumers of ganja or bhang, the habit is difficult to break off. There is a tendency in the case of both these drugs for the moderate habit to develop into the excessive, but a good deal depends upon the circumstances or societies in which a consumer lives. There are cases of moderate, habitual consumers having given up the use of these drugs owing to changes in circumstances or societies.

32. Among gosains, bairagis, and other ascetics the use of both ganja and bhang is looked upon as religiously essential, and their belief is that the god Mahadeo and goddess Debi have ordained that their devotees should use these drugs. Consumers of ganja and bhang among these classes take it in the name of god Mahadeo or goddess Debi, that is, they offer these to the deity before smoking ganja or drinking bhang. These persons are generally excessive consumers.

In some families bhang is prepared on certain days in the year and offered to their family gods, and then distributed to their guests. The use on such occasions is generally temperate. From an enquiry made by me I have learnt that the use of bhang on such occasions is considered essential only so long it can be had. When it cannot be procured milk or some other liquid is substituted for it. The use of bhang on such occasions is not considered injurious, nor do they say that it leads to the formation of the habit. I believe that there is some truth in this, because a large proportion among the higher classes take bhang on such occasions, yet the proportion of habitual excessive consumers of bhang among them is not nearly so large.

In some caste feasts or social gatherings of the higher classes bhang is prepared and given to men assembled, when almost every one takes it. The use on such occasions also is generally temperate. On the *fág* day some people indulge in it more or less excessively: the use on these occasions is admitted not to be essential.

33. Consumption of bhang in a moderate degree is not regarded as a bad luxury, but ganja smoking is held in disrepute except in the case of religious ascetics. People consider the ganja smoker as an unwelcome associate. Such men are generally debauchees or of a disreputable character. They consider it a vice, the indulgence in which is injurious to their health.

34. For some time the habitual excessive consumers of ganja or bhang, especially the former, will feel it a serious privation to forego its use, because when ganja smokers are confined in the jail they are not allowed the use of the drug under the jail rules. On this account their bowels become lax; they feel feverish, and refuse to eat and cannot do any work. This happens for about 15 or 20 days in the beginning; and afterwards in the majority of cases, they look healthier. As for the bhang takers they feel similar privations but in a less degree. Their bowels become

costive (constipated); they feel feverish, yawn, their eyes and nose run. A prisoner was seen by me to have attempted to commit suicide on being refused the drug (ganja) on his admission, because he said he could not bear the sufferings caused by its want.

35. I think it would not be feasible to prohibit entirely the use of ganja or bhang, as habitual excessive consumers will not fail to try all means to obtain it. It will cause discontent among them. The prohibition is likely to be followed by recourse to alcoholic stimulants among the lower classes, and in the higher classes opium smoking will take its place. This I say, because a ganja smoker told me that whenever he did not get ganja, he satisfied his desire by smoking opium.

38. Round ganja is preferred here for smoking to flat ganja. Consumers are unanimous in their statements that though the former possesses greater intoxicating quality than the latter, it does not cause headache, burning sensation in the stomach, like the latter. The drink prepared of "patti" (bhāṅg) is less intoxicating in quality and is said to be less injurious to the health than ganja.

39. None say that smoking of ganja in any form is less injurious than eating or drinking it. On the contrary, it is worse in effect than the latter.

40. Several kinds of sweetmeat containing ganja are prepared by native doctors and prescribed as a tonic to weak persons or for sustaining the power for sexual desire. Some of them are named here: (1) *Stri darp gaj kesari mōdak*; (2) *Brahmā kāmēshwar mōdak*, or (3) *Māhāmadan mōdak*. (4) *Rati wallabha mōdak*; (5) *Apar kam-āgni sandīpan mōdak*.

Ganja is also given in the treatment of cattle disease.

41. Excessive and moderate habitual consumers use bhang as a food digestive or to give staying power. They also take it in grief. The moderate, occasional consumers take it as a febrifuge or preventive of disease, when they go to malarious and unhealthy tracts, or when cholera epidemic or such other disease breaks out. In the latter case persons are persuaded to take the drug (ganja or bhang).

42. Ganja smoking or bhang drinking, whether excessively or moderately, is not at all beneficial. Two kinds of drink are prepared of bhang: one is called *ghota*, which contains a large quantity of it, which is taken by habitual consumers whether moderate or excessive; and the other is called *thandai*, which contains a small quantity of it, and its effect is marred by adding the several articles of bhang *massala* mentioned above. It is generally taken by occasional consumers in the hot season, or on the occasion of some religious festivals. Such moderate use of bhang is harmless, but in no case can ganja smoking be considered to be so, as it does not fail to produce its injurious effect in however moderate degree it may be taken.

43. Moderate consumers are not offensive to their neighbours.

44. Both ganja smokers and bhang drinkers state that if these drugs be taken moderately on the appointed times, they are refreshing to habitual consumers and create appetite. Bhang keeps its effect on habitual excessive consumers for three or four hours, and ganja for an hour or so. Afterwards uneasiness and a desire to take it again are produced in them. These persons remain

always under their influence. If they do not get the drugs afterwards, they lose their energies and become unable to attend to their work. The effect of ganja smoking is immediate and lasts for an hour or so; whereas that of bhang drinking is produced after an hour, but it lasts much longer than the first, for three or four hours.

45. Ganja smoking impairs the constitution of the consumers, who look pale and thin; whereas this does not appear to be the case with bhang consumers. Its consumer looks stout and healthy. Both these drugs have a tendency more or less to induce debauchery. The object of young men commencing to use them is to increase the sexual desire. Ganja smoking has a tendency to deaden the intellect and produce insanity. Bhang drinking does not, I believe, produce these effects. I have known a large number of bhang drinkers among Brahmans who are well known as reciters of the Vedas. Their intellect does not appear to have become blunt. They all look healthy.

From a few instances I have seen it appears that insanity, which was the effect of ganja smoking, was produced in the first stage of the persons using the drug excessively. It was temporary. They became quite sane after having been kept under restraint for some months. If such persons be again allowed the use of the drug, they will again become insane.

53. The excessive indulgence in ganja smoking incites unpremeditated, violent crime. Recently I saw a case of a man who went mad owing to excessive ganja smoking, and in that state of his mind he killed his own uncle who had remained to watch him. There was no ill-feeling between them. There was no motive of the murder except perhaps the uncle did not allow him the use of ganja. The story is that after the man having gone mad, the murdered man and his brother sat to watch the murderer. In the meantime the former slept near him telling his brother to keep a watch. Shortly after the murderer told the latter to go to sleep, saying that there was no necessity of a watch as he had become quite sane. On this the man went away. The murderer then got up, brought an axe from inside a room, and struck a blow with it to his sleeping uncle, and ran away, and concealed the axe and washed his wearing clothes. He confessed all these facts to the police, and other persons the following day. He, however, denied subsequently all knowledge before the magistrate. There was no other motive for this murder, which, I believe, was due to homicidal frenzy.

55. Criminals put bhang or ganja in some sweetmeats, generally the preparation is called *majum*, and give it to their victims, and thus stupefy them completely if a sufficient quantity is mixed.

56. I have not come across a ganja smoker in moderation mixing with it any substance except tobacco. It is only the excessive smokers who mix the several substances mentioned before whenever they desire to use the drug of increased strength. *Dhatura* is mixed for personal consumption in order that the effect may last longer than the mixture of ganja and tobacco. For the same object *dhatura* is sometimes mixed with bhang for personal use. If the mixture of ganja and *dhatura*, or bhang and *dhatura*, be taken by one consuming only ganja or bhang it produces a stupefying effect on him. So this mixture is very often used by road poisoners for the purpose of effecting some criminal motive. These men put the mixture of *dhatura* and bhang or ganja in sweetmeat intended for their victims,

in order to make themselves sure of producing the stupefying effect in them without exciting suspicion. If ganja or bhang be alone mixed, a larger quantity is required to produce the same effect produced by the mixture than that used with dhatura, and it will retain its strong smell, which will raise suspicion about the drug.

58. Ganja cultivated in the Nimar district is supplied to wholesale vendors of all districts. The effect of this arrangement is that the incidence of taxation is not equal, which I think should be maintained consistently with a principle that in order to control properly the consumption of all intoxicating drugs, they should be sold at such maximum procurable price as would ensure minimum chances of their being obtained illicitly, and that consumers in several districts, who prefer drugs grown in certain places, try to obtain them from such places instead of from Government godowns. Under the present arrangement hemp is allowed to grow unchecked in the Feudatory States adjoining these provinces, so persons can obtain the drug from them easily if they have got liking for it. In the Khalsa district of the Central Provinces it will appear from the magisterial statistics that several persons were punished for having grown ganja plants in their yards. I think these men grow it more on account of their liking for the drug cultivated at a certain place than with the sole object of eluding the tax. So long as the consumers don't get the drug according to their liking and the drug is not equally taxed throughout the country, the above mentioned object, *viz.*, the proper control of consumption of the drug, cannot be entirely fulfilled.

59. Unlicensed cultivation should be stopped throughout the country. The incidence of taxation should be equalised. Some central places for the cultivation of the plant should be selected in consultation with consumers in different districts. The Government should take control in its own hands of cultivation and supply of these drugs in all Feudatory States, for reasons given against question 58.

64. My objections to the existing regulations governing the export and import of ganja and bhang (drugs) are in regard to the districts bordering on Native States, where the cultivation of the plant has been allowed unchecked. There the consumption is as nearly uncontrolled as it is in the latter, because the consumers can procure as much drug as they want without requiring to pay any tax. Under the regulation a man is allowed to possess 5 tola ganja and 20 tola ($\frac{1}{4}$ seer) bhang without a license, so a person found importing these drugs up to this quantity cannot be prevented.

65. I think it is reasonable.

66. I think all kinds of ganja should be equally taxed.

67. At present the incidence of tax is unequal which I am for equalising.

68. There are no shops licensed for the sale of ganja and bhang here, where they are allowed to be consumed on the premises. I think such shops should not be allowed because they will then become abode or meeting places of consumers who are generally disreputable persons or bad characters. They will afford greater facility for the vice to spread.

69. The wishes of the people are considered before a shop is opened in a locality. The object of the measure is more for the sake of the sale of and the convenience of consumers than a con-

sideration of its effect on the society. This is because the people don't object to have a ganja shop near them as much as they object to have a liquor shop.

70. Banjaras and other labouring classes import ganja into the Sonapur State as well as into the Khalsa (Sambalpur) from the Boad State.

Oral evidence.

Question 2.—Rengal is sal or sargi.

Question 9.—I have not seen Nimar cultivation. In Boad the custom is to transplant or plant out the plants. So also in Athmalik. It used also to be done in Sonapur until the cultivation was stopped.

Question 24.—Most people of the higher classes in Sonapur take bhang, and most have at least tasted it.

Question 35.—In Sonapur the higher classes have not begun to take liquor, because it is prohibited by their religion. The liquor there also is of inferior quality and cheap.

Question 40.—The "mōdaks" referred to are made up by hakims. The five named by me are given to promote sexual desire. They are prepared from ganja flower and leaves together.

Question 41.—I have not tasted ganja myself; but I know the people think it prevents cholera. They say they use it; but I do not know myself. I have not remarked exceptional consumption in such times.

Question 45.—The case given under answer No. 53 was the only instance of insanity from ganja smoking, as referred to in answer No. 45, the details of which I can give. In that case, the man was found not to be insane, and was convicted and sentenced to imprisonment for life.

Question 53.—In this case the man was first acquitted on the ground of insanity by Diwan Banmali Misr. The Commissioner of the Division quashed the proceedings. The Raja and I tried the case and convicted the man and sentenced him to imprisonment for life. He had become violent from the use of ganja a fortnight before, and his uncle put him under restraint and refused him ganja. Suddenly he planned to get his uncle asleep, and then killed him. There was no enquiry as to any madness in the family. His uncles were not mad. I think his frenzy was due to previous ganja smoking. By homicidal frenzy, I understand a desire to kill a man, no matter who it might be. The man's name is Khairuth Napatti, convicted October or November 1892.

Question 55.—I know of a Nagpur case in which a sweetmeat called "majum" was given; but I do not know what its ingredients were.

Question 58.—The inequalities to which I refer are produced by the special arrangements made for the feudatories and zamindaris. My impression is that the Sonapur Chief puts on Rs. 2-8 as against Rs. 2 in the Sambalpur Khalsa; but both these rates for wholesale vend are less than the Rs. 3 of Raipur. This is due to smuggling from across Central Provinces border. This should be stopped.

Question 59.—The first sentence applies to the country beyond the Central Provinces border. Furthermore, I think that the cultivation should not be confined to the Khandwa area, because people like ganja from different localities. The areas would be small. The people in Sambalpur do not like the Khandwa ganja, and this leads to smuggling.

14. *Evidence of RAGHUNATH RAO, Extra Assistant Commissioner, Damoh.*

1. Local enquiries, mostly in the Feudatory States (Raigarh and Sarangarh) of the Chhatisgarh Division, where I have served. I had to deal with the excise as well as all other branches of administration of these States.

2. I cannot answer question No. 2, as I have not seen all these varieties of ganja or charas.

3. So far as my knowledge goes, hemp plant does not grow spontaneously in this province.

4, 5 and 6. I do not know.

7. It is only in the Nimar district that hemp plant is cultivated for production of ganja only.

8. The area under cultivation has enormously decreased owing to the restrictions placed on the cultivation of the hemp plant in these provinces.

9. I do not know.

10. They are of the same class as other agricultural cultivators.

11. I do not know.

12. I know nothing about wild ganja or its cultivation.

13. Yes. It has been restricted only to the Nimar district. I do not exactly know why this district was specially selected: but it seems that ganja used to be grown very largely in this district and the hemp plant grown there is much better than that grown in the other districts of this province. So far as I know there is no district in this province where hemp plant cannot be grown. I do not know whether any special conditions regarding climate, soil, etc., are necessary for cultivation of the hemp plant.

14. Only ganja is prepared; it is prepared in the Nimar district. I do not know to what extent it is prepared.

15. In these provinces only ganja is prepared from the cultivated plant. Bhang or charas is not prepared. I do not know how they are prepared.

16. Bhang is not prepared by the people in their houses. Yes, it can be prepared from the hemp plant wherever it is grown. I do not know whether bhang and charas could be prepared from the wild plant.

17. I do not know.

18. Yes, they deteriorate by keeping. It does not quite lose its effect in time, but its intoxicating effects are lost by lapse of time and the stuff becomes practically useless. If kept with ordinary care it can keep good for two years, I think. Exposure causes deterioration. If it is kept air and water tight its deterioration might be prevented for a few years, but not permanently.

19. Charas is never used except for smoking. Ganja is sometimes substituted for bhang for drinking where bhang is not available, and also for the preparation of *majum* and medicinal purposes. This practice is most common in the Uriya districts of the Chhatisgarh Division of this province.

20. I know nothing about charas: ganja smoking is not confined to any class or classes of people. It is, however, greatly used by those classes of people more or less who cannot use liquor, but, generally speaking, the bairagis, fakirs, and lower classes of labourers greatly use ganja all over India. I think the proportion of ganja smokers is 10 per cent. of the entire population.

21. Flat ganja is used in these provinces. I have not seen round or chur ganja, and can say nothing about it.

22. No charas is at all used in these provinces.

23. Bhang is not used for smoking so far as I know.

24. This is not confined to any particular class or classes of the people. In the hot weather and in the Holi festivals bhang is generally used by all classes of people who cannot use liquor. It is eaten as well as drunk. The entire population does not, however, use it. The proportion of the people so using the bhang may be set down at 5 per cent. of the entire population in this province.

25. If we were to compare the present consumption of the ganja with its consumption when people could grow it without restriction, its use has certainly decreased, but if we were to see the state of things after the restrictions were made, we find the consumption is on the increase; because the ganja grown in foreign States, which used to find its way in the British districts of these provinces, has been greatly checked by prosecutions of persons found importing foreign ganja. Charas is not used. The use of bhang is on the decrease, as no good bhang (grown in Malwa and Benares) could be available.

26. For ganja—

- (a) 30 per cent. of the total consumers.
- (b) 20 per cent. of the total consumers.
- (c) 35 per cent. of the total consumers.
- (d) 15 per cent. of the total consumers.

For bhang—

- (a) 5 per cent. of the total consumers.
- (b) Nil.
- (c) 75 per cent. of the total consumers.
- (d) 20 per cent. of the total consumers.

27. The ganja smokers are mostly the poorer and lower classes of the population, such as—

(1) Ganja for—

- (a) Day-labourers and agriculturists.
- (b) Bairagis, fakirs, and such people.
- (c) Middle and lower classes of people, who use ganja for purposes of entertainments and enjoyment of companies, such as singing parties, etc.
- (d) Middle and lower classes of people, of various castes and creeds.

(2) Bhang—

- (a) Middle classes of people.
- (b) Rich and higher classes of people.
- (c) Middle and higher classes of people of all castes.
- (d) Rich people generally.

28. (a) Ganja, 3 pies.

Bhang, 1 pie or even less.

(b) Ganja, one anna.

Bhang, 3 pies.

It may, however, be noted that these drugs are seldom used without companions. The number of companions is uncertain, but as the companions do not contribute to the costs, it is not taken into consideration.

29. It is only exceptionally that dhatura is ever mixed with these drugs. This is done only by those whom the ordinary intoxicating effects of the ganja or bhang do not satisfy. Rich people mix jaiphal (nutmeg), láichi and perfumes with ganja as a luxury.

The "bhanga massala," ordinarily consists of sonf, kásni, kali mirach, kakri ké bij (cucumber seeds), khas khas (poppy seeds), and sugar. Well-to-do people also add the following to this massala—késbar, láichi, bádám, and sometimes kismis.

30. The use of ganja is confined to adult males only. It is not usual for females or children to use ganja. The lower classes of people smoke ganja openly in companies; but the higher classes of people use it in small companies of their own, but secretly, as ganja smoking is looked down as a vice.

Bhang is used openly in companies. Adult males generally use it. It is in exceptional cases that bhang is used by children or females.

31. The habit is easily formed and can be easily broken. It requires determination. It is moderate habits which lead to excessive use of the drugs, as longer the use the less is the intoxicating effect of the drugs.

32. So far as I know there is no religious custom in regard to the consumption of these drugs. There are social customs regarding the use of bhang on the fasting day of the *Maha Shivaratri*. The majority of people use bhang on this day, but it is not at all essential to do so. Such occasional use of bhang cannot lead to the formation of the habit or be otherwise injurious.

33. The use of all intoxicating drugs is looked down as a vice by the public generally. The Hindu religion deprecates the use of all intoxicating drugs. There is no social or religious opinion for the practice, but as the use of these drugs does not bring on excommunication from caste they are used by the people. It is the bairagis, etc., who make use of ganja under colour of religion, but it is not really so. Ganja smoking is generally in disrepute. This sentiment is due to public opinion, as it is injurious in various ways. I do not know whether the hemp plant is ever worshipped.

34. It will be a serious privation to the bairagis, fakirs, and the idlers of Benares, Allahabad, Muthra, etc., to forego the use of bhang and ganja, because these people have been using it from times immemorial, and it is said that the intoxication keeps them up in cold and unhealthy places and helps them to concentrate their attention to the worship of God. The poorer classes of labourers and agriculturists will also find it inconvenient to forego the use of ganja, as it is said that it relieves them of the fatigue of the day at a trifling cost. The number of such people cannot, I think, be more than 20 per cent.

35. It will not be feasible to entirely prohibit the use of any of these drugs. If this is done, it will be consumed illicitly or recourse will be taken to other intoxicating drugs. The prohibition will cause discontent to some extent, but it will not amount to a political danger. The poorer classes will either give up the drug altogether or find out some other means of intoxicating themselves. The higher classes may take to alcoholic stimulants. The lower classes cannot do so for fear of detection and excommunication from caste. The higher classes can manage to use liquor without the risk of exposure.

36. Yes, there are reasons for thinking that the use of these drugs is being substituted by foreign

liquors by the educated people. This is due to modern civilization and association with liquor-using people. People must have something to make them gay and forgetful of the labours of the day. Ganja, bhang, opium, etc., are looked down and condemned by the educated people as well as by the higher classes of the community: consequently, those who can afford to pay for the costly foreign wines and spirits take to them. The number of such persons is very small, but it is on the increase. The large towns which are advanced in modern civilization will afford ample proof of this.

37. Charas is said to be more injurious than ganja or bhang. Charas is not used here; and I can say nothing more on this point.

38. I do not know.

39. No. Smoking is more injurious than drinking or eating, as smoking causes more heat to the brain and to the nervous system than eating or drinking does. When bhang or ganja is eaten or drunk it is always mixed with cooling drugs. This reduces the natural heat of the drugs and makes them less injurious.

40. Yes. Bhang and ganja are sometimes used for medicinal purposes, and are used in the treatment of cattle diseases. They are generally mixed with the massalas which are generally given to horses and trotting bullocks to relieve them of their fatigue.

41. Charas is not used here. Ganja does prevent disease in malarious and unhealthy places and gives staying-power and removes fatigue by moderate and occasional use of it. Bhang increases appetite and promotes digestion and alleviates fatigue. The drugs are very seldom used for these purposes. They are more used for the sake of intoxication than for their beneficial uses. Bhang is not very much used in these provinces all the year round, but ganja is so used by the lower classes of the people, as already stated.

42. Moderate but regular use of the drugs may be harmless or otherwise. It greatly depends on the controlling power of the man who uses them, as moderate habits lead to excessive doses.

43. Yes.

44. It refreshes and produces slight intoxication. It creates appetite. The effect lasts so long as the intoxication lasts. The after-effects are in case of ganja and bhang relieving if used as medicines, but if they are used as luxury, their after-effects are bad, such as dullness, laziness, and the like. Want of subsequent gratification produces longing and uneasiness in case of habitual users.

45. (b) Yes. It impairs eyesight and reduces the manly powers.

(c) Yes. It does in the long run.

(d) Yes.

(e) Yes.

(f) It deadens the intellect, but I know of no case where moderate, habitual use of these drugs had led to insanity. It certainly makes the person hot tempered and easily excitable.

(g) I know of no such case.

46. It is in every way injurious. It exhausts a man and makes him impotent. Brings on dullness, laziness, and insanity, in cases of young men, by causing heat to the brain. I had seen no cases of insanity from this cause, and am unable to discuss the matter fully.

47. No. The effect on the issue is weakness.

48. Persons who are habitual excessive users of the ganja are generally very soon exhausted and get no issue at all, and if they get any, their issues turn out very weak.

49. Yes. Prostitutes seldom use ganja or bhang. They generally use opium or madak for this purpose. The drugs when used as aphrodisiac are more injurious in their effects. They excite the nervous system and seminal discharges so long as the person is in his rising age, but they slowly exhaust the person and ultimately produce impotence.

50. In the above case the exhaustion is slow, but in cases of excessive use of the drugs the effects are the same, but they follow sooner.

51. No.

52. Excessive use may lead to crime. When a man is a habitual ganja smoker and he has not got money to purchase it, he may likely commit theft. There is, however, no necessary connection with these drugs and the crime in general.

53. I do not think so; I know of no case of homicidal frenzy.

54. Such cases are very exceptional.

55. No. To complete stupefaction it is necessary to mix dhatura or other drugs with the drugs. Criminals sometimes administer such preparations to stupefy their victims.

56 and 57. I do not know.

58. I am not fully acquainted with the system and am unable to answer the questions in this chapter, except the last question.

70. I am not in possession of any figures, but I know that the ganja grown in foreign Native States finds its way into the province. The Boadh and Sarguja ganja finds its way into the Sambalpur district and the Feudatory States and zamindari of the Sambalpur district and some of those in the Bilaspur district. In the Gurjat States, which border on the Chhatisgarh Feudatory States, Raigarh, Sakti, Korba, etc., ganja used to be grown and sold in local markets like any other article of food. The consequence was that a lot of this ganja used to be smuggled into the Raigarh State. I had made enquiries and was assured that it found its way up to Korba, Bilaspur, and Sheorinarain. Attempts were made to arrest its progress, and the authorities of Chhota Nagpur were moved to restrict its growth and sale. The consequence was that in 1892-93 the Raigarh State required more of the Government ganja from Bilaspur than it ever took before. The untaxed ganja of the Gurjat States was thus superseded to a very large extent. Until the surrounding Feudatory States restrict the cultivation and sale of ganja, as it is done in this province and elsewhere, the ganja which is grown there will surely find its way in the khalsa, as it could be had much cheaper than the Khandwa ganja sold by Government contractors. Little or no duty is taken on ganja in the Native States, and the restrictions recently placed on its growth and sale are more nominal than real.

Oral evidence.

Question 25.—The consumption of ganja is really less than it was before restriction. I do not think that there is a present tendency to increase. There has been a decrease in places. The general tendency of the restriction has been to decrease the number of consumers. Formerly the drug was produced in every compound, and

some have given up the habit from restrictions. I think there has been an increase in the consumption of spirits among the higher classes, who are beginning to look down on ganja. I think that there is on the whole a tendency to decreased consumption of ganja, even comparing the present with the time immediately subsequent to the restrictions. We cannot say definitely what is occurring in Feudatory States, for we are only beginning to have accurate figures, as they had their own ganja formerly. Good bhang has to be imported, so there is a decrease. Local bhang (or ganja) is stronger. I would have good bhang made more easily available, as it would take the place of ganja with the richer classes. This would be beneficial. Bhang is better than ganja.

Question 27.—Ganja is used at entertainments, such as *bhajans*, *jowara* ceremonies, mostly of a semi-religious character, and also at the *Holi*. I do not know of any purely convivial ganja entertainment being given, apart from some religious connection. The ganja is smoked. Of course smokers treat one another, apart from all religious considerations. In the entertainments to which I refer, non-smokers are offered and accept the ganja *chilam*. Bhang is more frequently used. The middle classes rarely use ganja. Bhang drinking is more respectable than ganja smoking, just as opium eating than opium smoking.

Question 41.—In hilly tracts ganja is used as a febrifuge. I have been advised in such tracts to use it when suffering from malaria. But I have never done so. The drugs are, however, more used for intoxication; by that I mean that they are more used for exhilaration than for beneficial or medicinal purposes. Ganja does not, I think, usually intoxicate in the common sense of that term.

Question 45.—My opinion is that the moderate habitual use tends to the excessive use. Thus there are the ill-effects I specify. But the poorer classes remain moderate smokers, because they cannot afford more. The moderate use, if it remains moderate, is, as I have said in answer No. 42, harmless. The poorer classes, who are the greater part of the consumers, and also people of determination, remain moderate smokers. Dhatura is not often used, because of constriction of throat, and also the very severe intoxication it produces. The people generally dislike and fear it. I knew a case of dhatura making a man insane. The general actual result is that the majority of moderate smokers do not go to excess. I do not think that the habit does harm to poor persons who have to work hard and to endure exposure.

Question 54.—I know no such case.

Question 55.—Dhatura, oleander roots, jowari roots, aconite are all used to increase the strength of ganja. Arsenic is avoided owing to its dangerous quality. I do not think that betel-nut is used; it is not intoxicating. Nutmeg is. I do not know of opium being used. What I have named above are used by excessive consumers. Dhatura seed is what criminals use. I have heard of cases, but never seen one. I have not heard of dhatura leaves being used. I do not know whether they are poisonous.

Question 59.—My general opinion is that consumption cannot wisely be stopped, because the poorest classes would be deprived of the one means they have for alleviating their toil. I think that the result would be not a resort to liquor, because caste as well as expense stands in the way, and most of those who can use liquor do so. The result would be a resort to other poisons. Maha-

ras, Kurmis, Lodhis are among the castes that are prohibited the use of liquor and so use ganja. Good bhang I have already said should be made more available. It would reduce the use of ganja as bhang, and also the use of spirituous liquor

among the higher classes. Ordinary ganja used as bhang is more injurious than good bhang. The higher classes would also smoke ganja less. They would also take liquor less. All this would, in my opinion, be a change for the better.

15. Evidence of SYED MOHAMED HUSAIN, Extra Assistant Commissioner; Diwan, Khairagarh State.

1. My information about hemp drugs is chiefly based upon my experience of about twenty years as a Revenue and Judicial officer in the Central Provinces, holding the various posts of Naib Tahsildar, Tahsildar and Extra Assistant Commissioner. Recently my services have been lent to the Khairagarh State by the Government for appointment as the Diwan of the State. In my judicial capacity, I have often had to inspect the excise shops, to arrange for the sale of intoxicating drugs, and to investigate into the crimes against the Excise Act. Besides, during the course of my studies, I had the opportunity to study medicine, as is taught by the hakims. It (my information) is based upon such information as I could now gather from the bairagis, who are addicted to the use of hemp drugs, and who visit this State during the rainy season. I have especially dealt with questions in the chapters V and VI with which I was much acquainted.

2. The definition of Dr. Prain can be adopted in those provinces. Bhang has got the different names of booti, bhajia, and thandai (cool drink).

Flat ganja is called "baluchur." A large collection of round ganja is called a "joori," while smaller ones "charpa."

18. Ganja does deteriorate by keeping, and when kept long enough loses its effect altogether.

It might keep good for three years at most with ordinary care. The chief causes of deterioration are damp, exposure to rains, to be moth eaten. It also deteriorates by being broken into minute particles. The effect is also lessened by constant exposure to weather. The special measure taken to prevent deterioration of ganja is to keep it in a closed room on a wooden platform, high enough from the ground between the strata of grass. The same is the case with bhang, but to prevent deterioration it is kept in *dholee* (a kind of bamboo basket). Charas is kept in leather bags and wooden "dabbas."

19. Ganja is for the most part used for smoking. But as "bhang" is rare in the Central Provinces, people use "ganja" instead in the following forms:—

- (1) They take a certain quantity of "ganja," wash it out, grind it, and take it with milk or water as they like. When taken with milk, it is called "dudh-bhanga."
- (2) When "ganja" is taken with sweetmeats it is called "majum."
- (3) Ganja is roasted in clarified butter with the following ingredients:—Sugar, chironji, almond, cocoanut, date, cardamom and saffron. When this is done, it is reduced to powder and used. This is called

"gooramba." Ganja with pepper and other spices is mixed with "chana" flour and cakes are made of it, which they call "bhajia." This kind of use is limited to Mahratta Brahmins.

20. Generally ganja is smoked by the low class people in the Central Provinces, such as Hindu mendicants, bairagis, gosains, etc. It is used by the criminal tribes, Pasi, Baria, Khangar and Kunjar. It is also prevalent to a little extent among the Chhatris and low class Muhammadans, such as Kunjras and Pinjaras, etc., but the latter use it very rarely. Charas is not at all in use here. Only some immigrants from the North-Western Provinces use it. One man in every 300 smokes ganja.

21. Flat ganja is preferred to the other kinds in the Central Provinces. They call it baluchur. But as it is difficult to obtain it, round is used instead of it. Chur is regarded as the most inferior.

22. Charas is not in use in these provinces, but I have seen at home (Oudh) that smokers prefer native charas.

23. Bhang is not smoked; if done so it causes no intoxication.

24. Bhang is not so prevalent in the Central Provinces as in the North-Western Provinces. Its use is for the most part confined to cities and towns. Bhang is generally used by the middle classes such as the Brahmins, Chhatris, etc. The moderate use of bhang is not looked upon as a mean thing, and the Hindu religion does not forbid its use. In the hot weather people take it as a cooling drink. The upper classes use it more than any other preparation of hemp.

25. The consumption of "ganja" is gradually decreasing. I attribute this decrease to the following reasons:—

- (1) The use of ganja is regarded as the nearest way of intoxication and as the people grow more enlightened, they knock off this servile habit.
- (2) The use of its price can also account for the decrease.
- (3) Ganja smoking seems to be giving way to alcohol, bhang, opium and madak. Those whose religion does not insist upon total abstinence from alcohol take to drinking, while the rest either smoke madak or drink bhang.
- (4) The use of bhang is increasing. This is due to its not being regarded as derogatory. The Hindus of middle and high classes, who abstain from alcohol, make use of it in company of their friends.

The use of charas in these provinces is so insignificant that it cannot be taken into consideration.

26 and 27.	GANJA.				BHANG.			
	Answer to 26.			Answer to 27.	Answer to 26.			Answer to 27.
	%	Higher.	Middle.		%	Higher.	Middle.	
		%	%			%	%	
	60	1	9	50	40	10	25	5
	15	...	3	12	15	3	10	2
	20	...	5	15	40	10	20	10
	5	...	...	5	5	...	3	2
TOTAL	100	1	17	82	100	23	58	19

The above figures show the result of the answers to both the 26th and 27th questions.

28. The quantity of ganja as smoked by the different classes of smokers is as follows:—

- Half a tola per day at 6 pies; or 2 seers, 5 chattaks in a year, which costs Rs. 11-8.
- Two tolas a day, which costs annas 2; 9 seers, 4 chattaks in a year, which costs Rs. 46.

29. Ganja is generally smoked with tobacco, but on special occasions city people in order to increase its effect, add the following ingredients:—saffron, cloves, jaiphal, sandalwood. It is sometimes moistened by milk or sugarcane juice. The mendicants also mix a little dhatura seed and leaves of *thoar* plant. Cowdung fire is preferred. Sometimes ganja is smoked in a pipe made of sugarcane (*vide* answer No. 19).

The following are the ingredients of bhang:—black pepper, cardamoms, roses, poppy seeds, cucumber seeds, sugar and milk.

Sometimes bhang is ground together with the ingredients given above and made into pills. This is generally done during the monsoons.

30. Ganja is for the most part smoked in solitude. It is seldom used in company. The use of ganja is mainly confined to the male sex; only some female mendicants, called "abdhootni," do so; children do not smoke. The consumption of bhang is generally practised in company; women and children do not drink bhang. Charas is not in use in these provinces, but in Oudh it is smoked in company in the shops kept by the women called "Sakins." Charas is also smoked by low class prostitutes.

31. The habit of consuming these drugs is not easily formed. It takes a long time. But when once formed, it is very difficult to break it off. Yes, there is a tendency of moderate habit developing into excessive. The same is the case with bhang, but it is easier to knock off this habit than smoking ganja.

32. To the best of my knowledge there are no customs, religious or social, in regard to any of these drugs.

33. The consumption of ganja is regarded very badly. The public opinion about this is that it is the most derogatory kind of intoxication, and its smoker is looked upon as a mean person. Its use is forbidden by the Muhammadan religion, and Brahmins also abstain from it.

Bhang is not badly regarded by Hindus, but the Muhammadan religion and laws of society strictly insist upon abstinence. To the best of

my knowledge hemp plant is not an object of worship.

34. The occasional, moderate or excessive smokers easily forego the consumption of the drugs they use, but habitual smokers will find it difficult. It will be a serious privation to habitual excessive consumers. But it is possible to knock the habit off. I have often met, as a Superintendent of Jail, with cases in which prisoners who were addicted to use of these drugs lost the habit. They do not suffer so much as opium eaters do. In my opinion moderate habitual consumers can forego the habit, and 75 per cent. of excessive habitual consumers. It is much more easy to knock off the habit of drinking bhang. Only excessive habitual consumers will suffer, but opium can supply its want. Ninety per cent. of bhang consumers can forego the habit.

35. In my opinion, it is feasible to prohibit the use of all these drugs. It should only be allowed as medicine for sick persons. Efforts will be made for a certain time to consume the drugs illicitly. The best way to enforce prohibition would be to prevent cultivation of hemp plant. I do not think that prohibition will occasion any serious discontent among the consumers. There is no fear of any political danger. The prohibition of bhang might cause some ill-feeling.

In my opinion, if the consumption of these drugs is prohibited at once, it will of course be a privation to the present generation for some time, but it must be taken into consideration that the future generation will be quite free from this vice, which is a great source of degeneration of morals and destruction of health. I fear the prohibition will be followed by recourse to alcoholic stimulants and other drugs.

36. The reasons why alcohol is being substituted for hemp drugs are—

- (1) alcohol is not so injurious;
- (2) the revenue from the sale of alcohol is daily increasing, while that from hemp drugs decreasing;
- (3) alcohol is prevalent among the more civilized people, and as a rule the less enlightened people are their followers, and as they come more and more in contact with them, they adopt their habits; hence the increase in the use of alcohol.

37. The only difference between the effect of ganja and charas is that the effect of the former is very quick, while the latter takes a longer time to cause intoxication. The effect of ganja does not last long; at the longest for an hour and a half. The effect of charas is more durable: it lasts for three or four hours.

38. Baluchur, *i.e.*, flat ganja, is more intoxicating than round ganja, and chur even less.

39. The smoking of the preparation of hemp drugs is a more injurious form of consumption than drinking or eating the same. The reason is that smoking produces greater and immediate effect on one's brain, while the effect produced by drinking or eating is not so quick, and it is less injurious to the brain. It has often been seen that the smoker, while taking a long draught of smoke, fell down quite stupefied.

40. The following are the virtues of hemp drugs according to the Arabic Materia Medica:—

They are aphrodisiac, cause internal swellings, produce temporary sexual appetite; also they are nervine tonic.

The injuries done by them are:—

They weaken the brain, injure vision, and produce the following diseases:—melancholia, madness, dropsy, impotency. They make a man's disposition sour. As these drugs have less virtues than injuries, the hakims (native physicians) never use them. The vaidyas use it seldom. Ganja and bhang are used in free treatment of cattle diseases.

41. (a) The moderate use of charas, ganja and bhang is not accessory or digestive. The consumer in the beginning finds his appetite increasing, but in the end he loses his appetite altogether.

(b) They give staying power under severe exertion or exposure as long as a man is intoxicated, but when he comes to himself, he finds himself very much fatigued.

(c) To the best of my knowledge it is neither a febrifuge nor a preventive of malarious diseases.

(d) Some people use it to give them staying power under severe exertion and exposure and not to feel fatigued.

For these purposes, these drugs are used by workmen and habitual criminals. At first they use it moderately, but gradually these habits become excessive.

42. The moderate use of any of these drugs is in my opinion not harmless. After all, the moderate habit always develops into excessive habit, and so it does a great deal of harm in the end.

43. They are not so offensive as those who indulge in these drugs excessively. They trouble their neighbours somewhat by coughing a great deal in the night and by their sour disposition.

44. The immediate effect of the moderate use of ganja is to produce a temporary briskness in the body. But after an hour the consumer feels a sinking sensation. It is not refreshing. It does produce intoxication. In the beginning, until the consumer does not become addicted to it, it creates appetite. But when the habit is formed, it produces quite the contrary effect. The effects produced by ganja last for about two hours after smoking. The after-effect is a sickening sensation. Yes, the want of subsequent gratification produces a longing and uneasiness to those whose habit has been formed.

45. The habitual, moderate use of these drugs produces noxious effect, physical, mental and moral. It is injurious to lungs, vision, and produces an offensive smell in the body of the consumer. It is useful in the early stages of dysentery. It impairs the moral sense, induces laziness, habits of immorality and debauchery. It deadens the intellect and produces insanity: one intoxicated is always half mad. In the beginning the insanity is temporary, but in the end it becomes permanent. The symptoms can be reinduced by use of the drugs after liberation from restraint.

46. The injuries the moderate use of these drugs produces, are discussed in the answer to the 45th question. The excess augments the injuries.

47. In my opinion the habitual moderate use

of any of these drugs does not appear to be a hereditary habit, and affects in no way the children of the consumer. But sometimes if the consumer is subject to some disease, such as insanity, etc., produced by the use of hemp drugs, it is transmitted to posterity.

48. If the consumer is subject to any of the diseases, such as asthma, dropsy, or insanity, owing to the excess in consumption of any of these drugs, his children inherit the diseases of the parent.

49. These drugs are practised as an aphrodisiac, but the effect does not last long. In the end the system becomes weak, which results in impotency. The prostitutes do not use hemp drugs in these provinces, but in North-Western Provinces and Ondh low class prostitutes smoke charas. Its use as an aphrodisiac is more injurious than as an ordinary narcotic.

50. The excessive use of any of these drugs as an aphrodisiac is very injurious. It causes impotency and many diseases of kidney and bladder.

51. The bad characters generally use these drugs in order to prepare themselves for some deed of violence, such as house-breaking, robbery and dacoity.

52. An excessive consumer is too much intoxicated to do any act of violence. The indulgence in these drugs weakens constitution, and thus renders the consumer quite unfit for any deed of violence. I have come across cases in which the police have made a criminal confess his crime by making him smoke ganja excessively.

53. Yes, the excessive indulgence in these drugs, especially in ganja, incites to unpremeditated violent crimes, such as homicide, grievous hurt and suicide. I learn two cases of this nature took place in Khairagarh which amounted to homicide:—

(1) One Khushal went to a "marrar" shop where he smoked ganja excessively, then drawing his sword killed the "marrar."

(2) One Hira Singh smoked ganja excessively and killed Hera, a blacksmith.

54. Yes, they do. Sometimes the wrestlers take bhang before wrestling.

55. Yes, the criminals, in order to further their designs, induce their victims to partake of these drugs, specially ganja. As a magistrate a case was brought before me, in which a man was robbed when subject to stupefaction produced by ganja. Generally, criminals add dhatura and *thoar* leaves to enhance intoxication. Only ganja smoking is enough to stupefy those who never smoke it. Bhang does not produce so much effect, it only causes giddiness.

56. By adding cloves and jaiphal to the hemp drugs the effect is enhanced but not so much as by an addition of the dhatura leaf. This ingredient is often used by mendicants and habitual criminals in order to stupefy their victims.

57. I do not know much about charas, but ganja, which is here sometimes substituted for bhang, is eaten occasionally as stated in the answer to No. 19. Eating produces less and slow intoxication than smoking.

58. The present excise administration of the Central Provinces is going on well, but there is still some room for improvement, which will be dealt with further on.

59. The only modification in excise administration:—I would suggest that a small tax be imposed on the consumers of these drugs, instead of which they be given a license permitting them to buy these drugs, and it may be enacted that any vendor of excise who sells any of the hemp drugs to anybody not holding a license, may be punishable together with the buyer. This will decrease the number of consumers and prevent the youth of noble families from this vice.

65. In my opinion the taxation (a) with reference to each other is reasonable, (b) but with reference to alcoholic and opium intoxicants, the taxation is very easy and should be enhanced. This easiness in taxation cheapens ganja, and therefore it leads to an increase in hemp drugs consumption.

68. No houses are especially set apart for the consumption of the hemp drugs in the Central Provinces; neither do people gather in the excise shops for this purpose. But as generally the same man is the vendor of opium and hemp drugs, people on a small scale, who are given to both of these drugs, smoke in the *maddakhana*, but steps have been taken to prevent this.

69. No public opinion is taken, nor the wishes of the people consulted as to the locality of the shop. The vendor always chooses some house by the most frequented public road, to the great annoyance of the neighbours. I believe the public opinion and majority are quite out of question as far as the Indian affairs are concerned, and on my experience I can say that whenever public opinion is taken, it has led to many difficulties and mal-administration. India is inhabited by various races of different creeds and customs, hostile to each other. Each race tries to put down the other. The race which has the greatest population has always the majority, and so those who are in minority suffer very much. I think the district officer should point out the locality for such shops while giving the license.

70. Ganja is very seldom illicitly imported in such districts of the Central Provinces as adjoin the Native States of Bhopal, Indore, Rewah, Panna and Maihar. The reason why ganja is not much imported illicitly is that it does not bring much money to the smuggler. I was a magistrate at Merwara, which is surrounded by the Native States of Rewah and Panna, and also a railway magistrate up to Sutna on the East Indian Railway for seven years. During this period only one case of this nature was brought before me, in which a man was charged with bringing a seer of ganja for a relative from Rewah.

Oral evidence.

Question 25.—The use of ganja is decreasing and that of bhang is increasing. Bhang is made in these provinces of the leaves taken from the ganja. The use of madak has greatly increased, and is replacing ganja to some extent. The Government prohibition of licensed opium smoking houses has had no effect in decreasing consumption; but has really increased the number of places in which opium is smoked in company. Ganja is considered more disreputable than bhang. The smoking of opium is also a comparatively respectable habit; but few respectable people smoke ganja.

Question 36.—Alcohol is not so injurious as ganja. That is my opinion. Liquor in moderation does no harm; but ganja does, however moderately it may be taken.

Question 38.—I know nothing about the qualities of the varieties of ganja, and have put down what other people have told me.

Question 39.—I have seen a man fall down after a draught of ganja in the way described. Twice witnesses have fallen down in my presence, and I have been told that they had just primed themselves with ganja. I have seen men fallen in the bazars, about whom I have been told that they had been smoking ganja. I cannot say if they were habitual smokers. I have seen a man fall in a similar manner when he was smoking tobacco in consequence of the chilam having been suddenly removed from the hookah by a companion, and the smoker having, consequently, taken a strong draught of air.

Question 40.—The name of the Arabic work I refer to is "Makhdan-ul-Addbiya," and the information it contains about hemp might prove interesting.

Question 42.—The tendency of the moderate habit to develop into the excessive is true of bhang as well as of ganja. It would be more correct to say that the moderate habit generally develops into the excessive in the case of ganja smoking, and in the case of bhang only when it is taken in company.

Question 45.—One case of insanity is that of Augat Pande, a man well known to me, who took both ganja and bhang. He had taken ganja for three years, and bhang from the time he was 14 or 15 years old. His father died young, and I knew his grandfather. There was no insanity in the family. I know of no epilepsy in the family. His elder brother taught him to drink bhang. He learnt to smoke ganja from his schoolmaster, aged 30, and other people also. Augat Pande became quite mad and recovered somewhat. He then relapsed, and now I hear he has died. He was mad for 6 months, well for a year, and then again went mad and never recovered. He died at the age of 22. He was a Brahmin by caste. I can't be certain there was no other cause contributing to insanity. The people of the village believe it was due to ganja. It is believed that ganja sometimes produces insanity. The man whose case I have described above belonged to Bijragogarh. Dr. Rice saw him when he was mad, as well as I recollect. That was in 1884 or 1885. I know the cases of two brothers, Ram Datt and Dev Datt. These did not become quite mad. They took ganja and bhang. They became weak in mind, and it became a question of allowing them to take possession of their estate, which was in charge of the Court of Wards. It was however released on its being shown that they were not mad. Ram Datt took to liquor and has recovered. Dev Datt did not take to liquor and is still short-witted. Their father was weak-minded and set aside. He was not a ganja smoker as far as I know. I know of no more cases of insanity.

Question 47.—A man named Munnu Das was quite well when he entered my service. He took to ganja smoking, and had asthma in consequence for 10 years. His two sons and one daughter all had asthma. I have no other case I can quote from personal knowledge.

Question 53.—The case of Khusal is not within my personal knowledge, nor is that of Hera Singh. They occurred 10 years ago or more. I can mention no others. The facts, however, are generally well known.

Question 55.—It is probable that dhatura was used in the case described.

Question 56.—Dhatura seeds are generally used for mixture to enhance strength of the drug, and when they cannot be procured the leaves of dhatura are used.

Question 59.—Respectable people would not like to take out licenses to consume ganja. Poor people would be discouraged from taking them by the price. The restriction by this method would be difficult but not impossible to enforce.

16. *Evidence of RAM KRISHNA RAO, Brahmin, Extra Assistant Commissioner, Bhandara.*

1. Twenty-one years' Government service in Nimar, Chhindwara, Hoshungabad, Bilaspur, Raipur and Bhandara districts of Central Provinces, also $4\frac{1}{2}$ years' service in Feudatory States of Nandgaon and Bastar in Central Provinces.

2. The definitions may be accepted as correct. Ganja imported from Khandwa is called "deshi" or country ganja, and that imported from elsewhere is called "pardeshi."

3. Khandwa, in Nimar district, Bastar Feudatory State, in Rajpur district, Central Provinces.

4. As far as I know there are no different names to it.

5. Not known.

6. Dense.

7. It is cultivated in Nimar district and Feudatory State of Bastar for production of (a) ganja.

8. There has been considerable decrease in the area under such cultivation in Bastar Feudatory State, as the State does not permit cultivation without obtaining a license which is granted on condition of handing over the produce to the State.

10. No special class. Ordinary cultivators.

13. It is only allowed to be grown in Nimar district. It is not common to all district. Among Feudatory States Bastar is the only State where ganja is cultivated. It was under contemplation to stop it when I left the State in April last.

14. They are prepared both in Nimar district and Bastar Feudatory State. Their extent is not known.

18. Ganja and bhang deteriorate by keeping. They lose their effect in time. They keep good for one year with ordinary care; causes of deterioration are damp, pressure, exposure to air.

19. They are generally used for smoking; but ganja is occasionally taken internally. It is used for bhang by frying it in ghee and grinding it with almonds, cardamon, seeds of cucumber, cloves, pepper. It is then made liquid in water, milk, and sugar and drunk.

20. (a) *Ganja*—

(1) Gosains, sadhus, fakirs, bairagis, 90 per cent.

(2) Gonds, 50 per cent.

(3) Brahmins, Muhammadans, other Hindus, 15 per cent.

(b) *Charas*—

(1) Muhammadans, Mahars, and other low castes, 10 per cent.

(2) It is also used by rich people, 5 per cent.

These proportions are for the province generally.

21. Flat ganja is preferred for smoking to that of chur or broken ganja.

22. Native charas is chiefly used in Central Provinces; foreign charas is also used to little extent by rich people. It is obtained from Upper India.

23. Bhang is not used for smoking, the leaves of the ganja being generally destroyed.

24. In Central Provinces about 30 per cent. of adult male population, particularly in the hot weather—

(a) eat bhang 5 per cent.

(b) drink bhang 25 per cent.

25. The use is generally decreasing owing to rise in prices, spread of education, difficulties in obtaining it, and increased facilities for obtaining spirits. I do not consider that increase in ganja income is due to its increase in use, but it may be due to better control than before.

26. My estimate is as follows:—

Bhang—

(a) 75 per cent.

(b) 15 ditto.

(c) 10 ditto, during Holi festivals.

(d) None.

Ganja—

(a) 50 per cent.

(b) 25 ditto.

(c) 20 ditto.

(d) 5 ditto.

27. *Ganja*—

(a) Religious men, such as gosains, bairagis and fakirs. They consider ganja as the gift of Mahadeo. It is supposed to concentrate the mind of the worshipper.

(b) Lowest classes, who are exposed to weather and undergo works of hard labour.

Bhang—

Well-to-do middle classes, generally Hindus.

28. (a) 3 pies to 9 pies.

(b) 9 pies to 24 pies.

29. *Ganja*—

(a) Tobacco invariably,

(b) dhatura rarely by gosains and fakirs.

Opium is also used, but very rarely, for more intoxication.

Bhang—

Bhang masala is not sold in the bazar by that name, but people purchase sugar, pepper, cardamon, almonds, dalcini, and other spices for mixing with bhang.

30. *Ganja*—

It is smoked both in company and solitude. Respectable people smoke in solitude, as it is looked upon as a vice.

Bhang—

Generally in company, and is not looked upon as a vice to the extent of ganja smoking.

Both the drugs are confined to male adults; they are never used by children.

31. *Ganja—*

The habit is easily formed by associating with smokers. It is difficult to break off in case of habitual excessive smokers.

Bhang—

It is easily formed but not difficult to break off. It has no tendency to increase.

32. In Holi festival bhang is used by Hindus. The use is considered essential to make a man more jolly. It does not lead to the formation of habits, nor considered injurious if taken for two or three days only.

33. Ganja is regarded disreputable in respectable and higher class of society, as its use is confined to religious and low caste people. Its excessive use makes a man wrong-headed.

Bhang is not looked upon as disreputable if taken at times and seasons. The hemp plant is not worshipped; but both ganja and bhang are offered to Mahadeo god by the smokers and drinkers.

34. It would be a serious privation in the beginning to bairagis and fakirs, also to some extent to lowest classes who are accustomed to work hard in cold and hot seasons, probably to 15 per cent., who are habitual excessive consumers.

35. It is feasible to prohibit the use although it will take a long time to have a complete effect. I think consumption can be stopped gradually. Prohibition may be enforced by increasing price of ganja. It will occasion serious discontent among the consumers in the beginning, but it would not amount to political danger. The prohibition might be followed by recourse to other stimulants to a very limited extent.

36. No.

37. Charas produces more intoxication and for a longer time than ganja.

38. They produce exactly the same effect.

39. Ganja smoking is more injurious than drinking bhang. The former produces asthma, bronchitis and such other diseases.

40. Native physicians use ganja and bhang as medicines occasionally. It is also used in the treatment of cattle suffering from diseases resulting from cold. The prohibition of this drug would not in my opinion result in inconvenience in this respect, as there are several other medicines to substitute for them.

41. The moderate use of ganja and bhang only may be beneficial in its effects as to (a), (b), (c) and (d); but if allowed, it is sure to result in habitual excessive use, and as such prove ruinous.

42. Ganja smoking and bhang drinking are not harmless. They might prove harmless for the time being, but in the long run their effects are injurious as stated above. People accustomed to drink bhang are eventually attacked by rheumatism, gout, and paralysis.

43. Yes; they are.

44. It produces intoxication under the influence of which appetite is created and a larger quantity of food is consumed. The effect lasts for about three hours. The after-effects are weakness, sulkeness, etc. The subsequent want of gratification produces longing and uneasiness.

45. (a) Yes.

(b) Yes, unless they get a very good and nourishing food.

(c) Not exactly.

(d) Yes; certainly the latter two.

(e) Yes.

(f) The moderate use has no such effect as far as I am aware.

(g) No such cases are known to me.

46. The habitual excessive use of any of these drugs would necessarily prove more harmful.

47. No.

48. No.

49. Yes; moderate use of ganja is practised as an aphrodisiac. It is used by prostitutes. The use is more injurious as the natural power is exhausted by artificial pressure. It tends to produce impotence in the long run.

50. The excessive use of this drug is made as an aphrodisiac. It is also used by prostitutes. The use for this purpose is more injurious than its use as an ordinary narcotic, as the natural power of a man is exhausted by artificial pressure. Its excessive use produces impotence.

51. No.

52. The excessive use of this drug makes a man weak and lazy. He is therefore unable to earn his livelihood and resorts to crime. A large proportion of bad characters are habitual excessive smokers.

53. I know of no case in which it has led to temporary homicidal frenzy; but it is probable that excessive indulgence in any of these drugs may incite to such crime.

54. Yes; but not as a rule.

55. Yes, complete stupefaction can be induced by this drug without admixture in case of a weak man who is not addicted to any kind of intoxication.

56. In moderation, if mixed with spices, its effect is light, such as table wine or beer. In excessive, its effects with admixture of dhatura and opium are severe and of long duration and intensity. Bairagis and fakirs mix dhatura and opium for personal consumption.

57. I have no personal knowledge of this.

58. The system is working well.

59. It requires more strict supervision in wild and distant parts of the district, such as zamindari and Feudatory States. The ganja cultivation in Bastar Feudatory State should be stopped, as it is not properly controlled, and there are reasons to suppose that it is smuggled into Khalsa.

60. I think it is sufficiently controlled in Nimar district, where ganja is produced; but in Bastar State it is not.

61. I have nothing to add on this point.

62, 63, and 64. No.

Oral evidence.

Question 1.—My home is in the Nimar district.

Question 22.—Charas smoked in Nimar and Chhindwara is brought from Indore. I am under the impression that it is made there. Charas used to be made in Nimar district, being collected from the ganja plants on leather; but the manufacture has been illegal since about 1872. I never saw it made; but I used to be told of the manufacture. By "native" charas I meant Indore charas. I have never seen any variety of charas.

Question 25.—I think that the feeling against ganja and bhang is stronger than it used to be and is becoming stronger. I think even sadhus, gosains, etc., are using it less, because, although they are little influenced by education, the price of ganja is rising; and this tends to decrease of consumption. I do not think that increased facilities for obtaining spirits influence the consumption much, for the classes that consume are different. My experience has been chiefly in Chhattisgarh. Only there has my attention been specially given to the matter.

Question 29.—Several fakirs and gosains have told me that they find ganja loses its effect, and they add dhatura. I think this is not commonly done. It is comparatively rare. Large numbers of such classes use hemp drugs (90 per cent.); but the use of dhatura is comparatively rare. I have seen dhatura put into a chilam of a devotee, but cannot say what amount. I have heard opium asked for. On inquiry also I learned that it is used, but less frequently than dhatura.

Question 42.—I have known persons who suffer from rheumatism and gout. I associated the rheumatism and bhang, because I have known some who take bhang in the hot weather and suffer from rheumatism in the rains. Also because the first year a friend of mine took bhang was also the first year he had rheumatism. The general impression also is that bhang produces rheumatism. That may be due to its being regarded as a cooling drink. The remarks I make about paralysis are based on what I have been told

regarding the effects of bhang, not of ganja, on old people. I have no personal experience.

Question 50.—I know cases of excessive smokers who have become impotent. I know of some at the age of forty or forty-five. My belief is based on statements reported as made by those who must have known the fact.

Question 52.—I think that a large proportion of bad characters are addicted either to hemp drugs or to some intoxicants. As a clerk of court and as magistrate, I have seen many accused persons, and know that a large proportion use intoxicants. Ganja is more used by the criminal classes than other intoxicants because it is cheaper; but it is less demoralising than madak, though more so than liquor, which is weaker. I think many sadhus and bairagis are of bad character.

Question 55.—I have myself experienced this stupefaction. Once at a Ganesh Chaturthi feast I smoked ganja (unwittingly) in a pipe of tobacco, and was insensibly asleep for two hours. I could have been robbed. I do not believe there was any dhatura. I never heard so. I was told there had been ganja put in the pipe. I have no recollection of what happened at the entertainment. I smoked tobacco then in a chilam, and always swallowed the smoke. I took three pulls at the chilam and then felt insensible. I suffered from bronchial trouble, and have been ordered to give up smoking my tobacco through a chilam. I now smoke cheroots, etc. I have never smoked ganja but that once.

Question 59.—My general opinion is that hemp drugs are harmful. I would have further restrictions. I would have repression of ganja and also of bhang. If that is considered too drastic, I would have further taxation: (a) to raise the price; (b) to make the maximum 2 tolas instead of 5; and (c) to reduce the number of shops. I believe that such restrictions would not drive many consumers to other drugs, for caste would be against other intoxicants. Of course dhatura is worse than ganja; but few would take to that drug.

17. Evidence of BATUK BHARTHY, Superintendent of Kalahandi State.

1. I have two sources for this information—first from my official capacity as a Tahsildar in Central Provinces, and in my youth from seeing my relations and others use these drugs, bhang and ganja.

2. Yes; these definitions can be accepted. But bhang is locally called here kushambha, ghoti, phanki, and buti.

7. No, not in this State.

14. No, not in this State.

19. No charas in this State is used. Besides smoking, ganja is used in medicine. The name of the medicine is módak. In this medicine, which is prepared from sugar and *mewas*, such as almond, kismis, cocoanut, etc., ganja is put, and then cakes are made and eaten. In this State ganja is also drunk like bhang. This medicine is taken by well-to-do people.

20. All classes smoke ganja, specially Paiks and Katkis. Ganja in this State is smoked in towns and large villages generally. The hilly (Kondhs) and the low caste people who drink liquor seldom or very rarely indulge in smoking ganja.

21. Flat ganja is smoked in this State. No ganja of other kinds is obtained here.

22. No charas is used in this State.

23. No, not in this State.

24. Bhang is not eaten in this State, but it is drunk. The Brahmins and other high castes drink it. But I know by experience, both in Central Provinces and North-Western Provinces, that in the cold season many prefer to eat bhang by making small balls, and they then swallow it.

25. In this State the consumption of ganja from 1884 to 30th September 1893 is as follows:—

	Quantity in each year.			REMARKS.
	Mds	srs.	ch.	
From 6th Aug. 1884	0	21	8	It will appear from these figures that ganja smoking is gradually increasing. The country is now opened as roads have been made. There is a belief among the new-comers and also those who have to live and work in jungly or malarious places that by smoking ganja the effect of the bad climate is removed. Hence this increase.
Ditto 1885	3	5	7	
Ditto 1886	4	22	0	
Ditto 1887	4	10	0	
Ditto 1888	3	18	8	
Ditto 1889	3	10	0	
Ditto 1890	3	32	0	
Ditto 1891	4	31	0	
Ditto 1892	5	32	0	
Ditto 1893 up to Sep.	4	1	0	

26. The proportion of habitual moderate consumers to habitual excessive consumers is as 10 is to 2. The latter (c) (d) is 8 to 2. This is for ganja only.

The proportion of bhang is 8 to 1 to (a) (b) and 2 to 4 to (c) (d). At the time of "Mesh Sankrant," in the month of Baisakh of each year, bhang is drunk by all higher class people.

27. These are mainly from the labouring classes, Nalia Paiks, who were a sort of militia in the time of the late Raja, and the Katki people.

The labourers, after the day's work, find some relief in smoking ganja. The Nalia Paiks are of lazy habits, which lead them to smoke ganja. The Katki people, who carry on trade and go from place to place, smoke ganja to avoid the effects of the climate.

28. (a) 3 pies } Ganja.
(b) 1 anna }

(a) 1 pic } Bhang.
(b) 3 pies }

But ganja is generally smoked in company. It is not the case with bhang generally. It is taken alone.

29. (a) In ganja smoking ordinarily tobacco is mixed.

(b) Exceptionally the consumers mixed opium, the juice from the root of dūb grass and dhatura is also mixed to it. All this is done to enhance intoxication. In bhang also dhatura seeds are mixed to increase intoxication.

Usually with bhang black pepper and souf (anise) are mixed. But in hot season and on occasions, cardamom, cucumber, and kakri and melon seeds, kasini, rose leaves, almonds, saffron, and javitri are also mixed with pepper and souf. Rose water and keuara flower water are also mixed.

I have observed bhang drunk as follows:—

- (1) Mixed with milk and sugar, as sherbet.
- (2) Mixed with cream and sugar, ditto.
- (3) Mixed with ripe mangoes and sugar, ditto.
- (4) Mixed with phalsa fruit berry, and sugar, as sherbet.
- (5) Mixed with kasini seed and sugar, as sherbet.
- (6) Mixed with water and sugar, as sherbet.
- (7) Mixed with bel ripe and sugar, ditto.
- (8) Mixed with curd and salt, ditto.
- (9) Mixed with curd cream and salt, ditto.
- (10) Mixed with raw mango roasted and salt, as sherbet.
- (11) Mixed with raw tamarind fruit roasted or boiled and salt, as sherbet.
- (12) Mixed with orange juice and sugar, as sherbet.

These are drunk on occasions by rich and well-to-do people. When salt is put, a little asafetida roasted is also mixed. Rose water and keuara flower water is also mixed.

30. The ganja is generally smoked in company, and sometimes alone. But bhang on certain occasions is drunk in company, but generally alone in solitude or at home. On such occasions as Holi and Shivaratri and Mesh Sankrant, in the month of Baisakh of each year, the children also drink bhang.

31. Yes; bhang-drinking habit is easily formed. It is rather difficult to break off. My experience

leads me to think that it seldom develops into excessive drinking. I am unable to say so about ganja smoking.

32. On certain religious days, such as Dasara, Shivaratri, Holi, and Mesh Sankrant, in the month of Baisakh, bhang is drunk. It is regarded as essential. It is drunk generally moderately. It is not injurious, nor does it lead generally to the formation of a habit.

33. Bhang drinking is not regarded or taken in a bad light. The public do not censure a bhang drinker.

But ganja smoking is not taken in a favourable light. It is generally in disrepute. I have known parents rebuke their sons and guardians thus hard for smoking ganja, because ganja smoking leads to certain diseases, such as asthma and insanity. There are ballads prohibiting ganja smoking. I do not know of any custom of worshipping the hemp plant.

34. Yes; it would be a great privation, because the ganja smokers, if they do not get ganja, will feel great inconvenience, especially the daily habitual smokers; for without it they will feel very uneasy, and will not be able to do their work and take their food. This remark also applies to daily habitual moderate consumers of bhang. To the daily habitual excessive consumers to forego ganja smoking will be a very serious privation, because they will become quite useless, and even their life may be endangered without taking the drug. The percentage of the former is about 20 and that of the latter about 10.

35. No; it will not be feasible to prohibit the use of bhang and ganja. If prohibited, ganja and bhang will be surely consumed illicitly. Charas can be prohibited, because the charas smoker can manage with ganja smoking. I can't see any way to enforce prohibition, except by heavily taxing the drugs. Certainly the prohibition will occasion serious discontent and ill-feeling among the consumers, and it would certainly be a danger politically, because a vast number of them will be dissatisfied and discontented. Moreover, the total prohibition will lead the consumers to liquor drinking and opium eating, because when a habit is formed they cannot do without it.

36. It has not come under my observation that alcohol is substituted for any of these drugs, but I know of cases where for liquor bhang drinking or ganja smoking has been substituted.

37. As far as I have learnt from people, the effect of charas smoking is different from that of ganja smoking; charas, they say, is worse than ganja. It affects the brains sooner than ganja, and makes the eye whirl and red.

38. The chur ganja is less intoxicating than round and flat ganja. Opinion differs as to round and flat. Most people consider flat ganja more effective and intoxicating.

39. No; the drinking or eating of any preparation of hemp plant is not more injurious than smoking, because in drinking they put massalas (spices) and black pepper, and in mōdak, a form of medicine, the effects are less injurious than smoking.

40. Yes; I have known baidis or native doctors use bhang with other medicines in case of general debility or weakness, and ganja in mōdak. Bhang is known to be used in cattle diseases by people.

41. The moderate use of bhang is as a food accessory and digestive. It also gives rest from fatigue. Ganja is considered as preventive of diseases in malarious and unhealthy climates, and

also alleviates fatigue. The working classes use ganja and bhang to alleviate fatigue after their days' labour, and the rich classes use these as accessory to the digestion of their food and for good appetite. My reference is to moderate habitual use.

42. The moderate use of bhang is generally considered harmless, if not beneficial, as apparently no complaints have been heard, and it is also a general belief.

43. Yes, they are inoffensive to their neighbours.

44. The moderate use of bhang is refreshing, produces intoxication, creates appetite, gives sound sleep, but it does not allay hunger. Those who take in the evening the effect lasts up to midnight. The after-effect is, I believe, dullness, and the want of subsequent gratification produces longing and uneasiness.

45. (a) and (b) The habitual moderate use of bhang does not produce any noxious effect, nor does it impair the constitution.

(c) and (d) No, it does not.

(e) The consumers become a little lazy.

(f) No.

(g) Not come under my observation.

46. I have come to know by observation that the habitual excessive use of ganja is very injurious. I think of all the intoxicants ganja is said to be the worst. I have known cases that by excessive use of ganja the consumers who were very healthy in their youth have become totally blind. Many cases have come to my knowledge of insanity, both temporary and permanent, produced by excessive use of ganja. In old age the excessive smoker of ganja generally gets cough and asthma, and many have come to their grave at a premature and early age. I have seen excessive smokers of ganja to become cranky and not affectionate to their wives and children, and quite indifferent to their affairs. In short, the excessive habitual smoker of ganja becomes quite useless to himself and to society.

47. No; I am acquainted with persons who are habitual moderate consumers of bhang and ganja, but their children never use these drugs.

48. It has been often observed that the sons of habitual excessive drinkers of bhang and smokers of ganja have been found using these drugs, but there are some exceptions to this; also generally in some family where excessive use of these drugs appears to be hereditary.

53. Very seldom. I know of one case of an excessive ganja smoker where there was homicidal frenzy.

54. No; on the other hand, I have known cases where the use of these drugs (bhang and ganja) will stupefy them and make them unfit for any action.

55. Yes, the criminals do this to their victims. Yes, without admixture, by bhang drinking alone complete stupefaction can take place.

56. The dhatura for personal consumption with bhang is used in a moderate quantity to increase intoxication. But it is used in large quantity with bhang on others with criminal intentions and to commit crimes.

57. I have known in Central Provinces and also in this State of Kalahandi that ganja is drunk as bhang with bhang massalas. The effect is more injurious than the bhang leaves; but as no bhang leaves are obtained, they drink ganja. Ganja is sometimes roasted in ghee and eaten in this State.

58. The present excise arrangement is working well.

60. No ganja is produced in this State, and it should not be allowed.

61. No, charas is not produced.

62. Not produced in this State.

63. No objection to offer.

64. None.

65. The tax on ganja is less in these provinces than in the North-Western Provinces. In my opinion, it is much less here and should be raised. No bhang or charas is sold here, so it cannot be compared; as compared with the tax on opium, the tax on ganja is far less.

66. I would propose different rates on different kinds of ganja, as they being of different qualities, some inferior and some superior, should be taxed according to these qualities.

67. No, I have none.

68. There are no such houses or shops in this State where these drugs or their preparations are consumed on the premises. I think where the consumption is allowed on the premises it should be stopped, because it is tempting and leads many people to it.

69. The wishes of the people are not generally consulted, as there is no public opinion on the subject. I think it will be better to consider the local public opinion, if any is offered.

70. I know in my official capacity that ganja was imported from the adjacent Native States of Panna, Rewa, Nagode and Bhopal, etc., to Central Provinces, there being no proper control in these States and the taxation being very light or not at all.

In this State of Kalahandi ganja is imported from the neighbouring State of Jeypore. No tax is levied in that State on ganja, and it is sold in the bazaar there like tobacco, without any check, very cheap. The people grow ganja there without any control, and I am told that no tax is levied there.

There was no proper control at the time of the late Raja regarding the cultivation of hemp plant (ganja) in this State. It was grown by the people wherever they liked, especially in the hilly tracts, I am told. No bhang or charas was manufactured. Since the State came under direct management of the British Government on account of the minority of the Raja the cultivation of the ganja is totally stopped, and it is now penal to cultivate the same. The system followed in the Khalsa is strictly observed here. The ganja for sale is obtained from the Government godown at Raipur, and it is kept under lock and key in the treasury room under charge of the tahsildar, who issues the same to the contractor, and a proper account is kept of it. No bhang and charas is sold here.

The clean ganja is given to the contractor, and the sticks and bhang are burnt.

18. Evidence of ALAM CHAND, Superintendent, Bastar State.

1. When I was tahsildar at Khandwa, in the Central Provinces, I have had opportunities to inspect the cultivation of hemp in the Khandwa district, and its adjoining districts and States, such as Indore, etc. Other opportunities I have had when I was Diwan of Kanker and Chhuikhadan, and Manager of Kawardha and Superintendent of Bastar. The experiences I have obtained from the people and their associates, who smoke ganja, are embodied in my answers. At Kawardha there is a religious society of Kabir Panthis, and ascetics from many parts of India, such as North-Western Provinces, the Punjab, Bengal, and China, do frequent these religious associations, and the effects that I could perceive upon these persons are given in my answers.

2. No charas or bhang is prepared from hemp here or used. I simply confine myself to ganja. Formerly hemp used to be cultivated for production of ganja.

The definitions given by Dr. Prain can hold good in respect of ganja.

Cultivation of hemp and production and preparation of ganja have been stopped by the Government, but the process which the people had resort to when they had cultivation to a little extent in the compounds of their houses is as follows: It was not being trodden under foot in order to give a flat shape, but the people used to stack it, putting the flowering tops one above the other, grass or straw intervening to save it from damp, and then pressing it with some heavy timber or other heavy thing. This process used to give it a flattened shape. No steps had hitherto been taken here to procure "round" or "chur" ganja.

3. Here I have never seen hemp growing spontaneously.

4. It is generally known by the name of "ganja" only.

5. Wild hemp does not grow here, so I cannot relate the conditions necessary for its growth.

7. None of these products is now being manufactured, nor hemp is cultivated in Bastar.

8. Formerly, *i.e.*, two years ago, people used to cultivate hemp, but as its cultivation has now been stopped by the Government, there is now no area under hemp cultivation.

9. Formerly the people did not prepare fields, but scattered a few seeds in their compounds or raised a little crop by transplanting the seedlings. They consider the plant fit for preparing ganja when its leaves become yellowish and its heads resinous. When the plants had grown one foot or one-and-a-half feet, they cut the top of the plant and clear up the big leaves in order to enable it to give out more branches and getting *kalis*.

10. The cultivators did not form a special class, but they belong to the class of agricultural cultivators (*i.e.*, Murias, Gouds, etc.).

11. Here we have no wild hemp. Ganja has hitherto been produced from cultivated hemp.

12. I have never seen ganja having been manufactured from wild hemp.

13. Its cultivation has now been entirely stopped in this State. Bastar is well suited to the growth of ganja on account of being tableland and excessive rain. In the hilly parts or soil saturated by water, I think its cultivation would not be possible.

14. Ganja used to be prepared from hemp plant. I would estimate its product at about 400 seers.

15. Here ganja is not eaten, nor drunk. It is used for smoking only after cleansing, taking out its seeds and rubbing it on palms of hands, mixing some water.

16. Bhang is not used; nor was it formerly used. Wild hemp does not grow here.

17. Here agricultural cultivators or Murias (aborigines). They used to cultivate it.

19. Charas is not used here for smoking; ganja is only used for smoking. It is not applied here to any other use except for medicines, as will be stated hereafter.

20. The ganja smokers are very few; because the aborigines of this State satisfy the desire of intoxication by having recourse to the use of tari, sulphi, sindhi and landha (fermented mixture of kora seeds).

Day-labourers and sadhus use ganja by filling it in leaf-pipes or chilam. More is used in the head-quarters of tahsil. Rural population use it very seldom. The proportion of the consumers is '06.

21. Flat ganja imported from Raipur is preferred. No other kinds of ganja are used here.

25. No bhang or charas has ever been used here. Only ganja is used, but its use is on the decrease owing to the imported ganja being dear.

The statistics of ganja are given below, as could be ascertained from this office:—

Years.	Place of purchase.	Rate.	Quantity sold.	REMARKS.
		Rs. a. p.	Wds. srs. ch.	
1891.	Bastar	0 12 0	2 20 0	As cultivation of hemp was stopped in 1891, and the raiyats had their own ganja, sale was less in 1891-92 as compared with 1893, in which orders were issued to burn the produce of Bastar, if any.
1892.	Raipur	0 12 0	3 27 0	
1893.	Raipur	0 12 0	5 15 0	

26. The proportion of the consumers of the class (a), (b), (c), and (d), is as follows:—

- (a) 8.
(b) 2.
(c) 2.
(d) 1.

27. Table showing the classes from which each of (a), (b), (c), (d), are taken and their habits of life and the circumstances which mainly lead to the practice.

Description of class.	Name of class.	Habit of life.	Circumstances that led to the formation of habit.
(a) Habitual moderate consumers.	Professional day-labourers, such as breakers of stones, etc.	They live on their daily labour.	Excessive work and hard labour.
(b) Habitual excessive consumers.	Ascetics and the persons without any occupation.	The former live on alms, and the latter on bounty of their relatives. The latter belong to different classes of inferior order.	The former to concentrate their minds on fixed object. The latter on account of company.
(c) Occasional moderate consumers.	Few belong to respectable class who cannot use liquor and who associate with sadhus.	Among these must be considered spoiled children of well-to-do persons on account of bad company.	Company.
(d) Occasional excessive consumers.	Low castes, such as Mehra, Ghasias, Chamars, etc.	Menial service or occupation, such as cutting grass, or syce, etc.	For alleviating fatigue and a desire to work more which I think they can hardly accomplish by taking resort to such remedy.

28. The average allowance and cost of ganja per diem is as follows:—

(a) From 3 mashas to 6 mashas, costing from 3 pies to 6 pies.

(b) From 6 mashas to 12 mashas, costing from 6 pies to 1 anna.

29. Ordinarily tobacco is the ingredient of ganja, but some people mix $2\frac{1}{2}$ seeds of dhatura, in order to increase intoxication. Admixture of tobacco decreases the intoxication.

Bhang massala consists of rose flowers, sonf, kasni, pepper, sugar, unrefined sugar, khash-khasha, keora, cucumber seeds and milk. These are mixed during hot weather, and only pepper during other weathers.

30. The consumption of ganja is practised in solitude. It is mainly confined to the male sex. The children do not consume it.

31. No, it is not difficult to break off. There is a tendency in the case of ganja for the moderate habit to develop into excessive.

32. I did not come across any custom, social or religious, in regard to the consumption of ganja, but Shiva worshippers often use it, and sometimes Vaishnwa. It is likely to lead to the formation of the habit.

33. The consumption of ganja is generally in disrepute. There is no custom of worshipping hemp plant as far as I have seen.

34. No, the prisoners and the spoiled children of well-to-do persons, who used to smoke ganja before, can easily give up the habit of smoking ganja if they are properly supervised. Of course they will feel unwell for some time, but in the end they give up this bad habit.

35. It would be practicable to prohibit the use of ganja. The people would give up smoking ganja when they cannot procure it for their use. It is not cultivated in Bastar. The prohibition would not occasion any serious discontent among the consumers. Such discontent in no way amounts to a political danger, as far as Bastar is concerned. The prohibition would be followed by recourse to liquor to small extent and to opium to a large extent.

36. The consumers of ganja do not care a fig for alcohol. I cannot say that alcohol is being substituted for ganja.

38. In my opinion the three different preparations of ganja have the same effect on the consumers.

39. I don't think the smoking of the hemp plant is in any way less injurious.

40. Yes, it is used in the treatment of dysentery, diarrhoea, etc., and also in that of cattle diseases.

41. No, even moderate use is not beneficial in its effect. It is not digestive. It gives staying power under severe exertion and alleviates fatigue temporarily, but when the reaction begins, the consumers get weakened and intellects deadened. It is not used as preventive of disease though the people labour under wrong impression that it is beneficial.

42. I do not consider the moderate use of ganja to be harmless, because the use alleviates fatigue for a short time, but when reaction begins, the consumers get weakened and the intellect deadened. It develops into habit. It produces cough, petulant temper, paleness on the face, and redness in the eyes.

43. Moderate consumers are inoffensive to their neighbours, but its offensive smell is not liked, and their company will spoil their children, therefore the people do not like them as neighbours.

44. The immediate effect of the moderate use of ganja on the habitual consumers is stimulative. It gives power and is refreshing, and produces intoxication. It allays hunger. Its effect lasts for three hours. The want of subsequent gratification produces uneasiness, bodily pain, etc., and longing for a repetition.

45. Yes. It impairs the constitution. In no way it will increase the appetite. It will cause bronchitis or asthma. It will produce laziness and habits of immorality. I do not think that its moderate use will cause insanity, but this is the question which does not fall within my province. I have not seen its effect to such an extent.

46. Excessive habitual use of ganja is certain to produce insanity. Men using ganja moderately often take recourse to excessive use, simply sometimes to relieve them of their mental anxieties. It deadens their intellects, and for want of self-control, induces them to indulge too much in its smoking.

47 and 48. It is not a hereditary habit, but affects the health of the children.

51. I do not think that its moderate use in any way affects the crime in general or in particular. Some of the bad characters, who use ganja, commit petty thefts, but not in a larger proportion.

52. As stated in No. 51.

53. I have not seen such a case, nor do I know of any case that the consumer's brain was so turned out as to attempt murder.

54. I have not seen such cases.

55. I have seen two or three instances when criminals robbed their victims by administering ganja mixed with other intoxicating drugs, such as dhatura. Ganja alone I don't think can stupefy completely.

58. I think the present system of excise administration in respect of ganja is working well, and no modifications are necessary.

60. Hemp is not cultivated here. It is imported from Raipur.

61. Charas is not imported here.

62. Bhang is not used here.

63. I have no objection to offer.

64. Ganja is imported from Raipur, and the rules now in force governing its import are not objectionable. It is sent in sealed boxes.

65. As compared with the tax on liquor, the taxation of ganja is not reasonable. It is small. I think the tax should be increased, for a ganja smoker can satisfy himself on payment of a pice or two pice.

66. No different rates of taxation are necessary.

67. The tax on ganja is not felt at all. It is comparatively very small. I would advocate its increase.

68. There are shops licensed for sale of ganja, but ganja is not consumed on the premises. I think it should be sold by licensed shop-keepers, if its entire sale is not prohibited.

69. The people are not consulted, but shops are opened at such places where they can conveniently have a resort to. It is I think not necessary to consult them.

70. Here ganja is imported from Raipur. Duty is paid on the ganja used here. Generally untaxed ganja cannot be used here, though there may be some cases of importation from foreign States.

19. Evidence of T. GOONDIAH, Tahsildar, Janjgir, Bilaspur District.

1. I have been Tahsildar in Chhattisgarh Division for nine years; and so I have had opportunities of obtaining information regarding ganja, which is supplied to this division from Khandwa and issued under our supervision.

2. Yes. In Chhattisgarh division these products are known by the names of (1) ganja (ganjai in Uria country); (2) bhang; (3) charas.

14. (a) Ganja is cultivated in Nimar district under orders of the Government.

(c) Bhang is prepared at home by the persons drinking it.

15. Ganja is generally used for smoking and bhang for eating and drinking. Very few people eat bhang; generally it is drunk.

16. Yes. Bhang is generally prepared by people in their houses. Yes.

18. Yes. They deteriorate by keeping more than a year. They do not quite lose their effect. They keep good with ordinary care for twelve months.

19. Ganja is generally used for smoking, but it is also used as medicine in cattle diseases in this division, and also given to cart bullocks when they are fatigued. As medicine, it is given with dahi or curd milk, and for fatigue it is given with turmeric and gur.

20. Generally, labouring classes smoke ganja. It is also smoked by artisans and bairagis and gosains (religious mendicants). It is smoked throughout the province. It is not limited to any special locality. Two per cent. of the population may be smoking ganja.

21. Flat ganja is always supplied to this division from Khandwa, and it is liked by people in this country. I have not seen round ganja or "chur."

22. I know nothing about charas.

23. No. It is never used for smoking.

24. Bhang is generally drunk by Marwari and Hindustani Brahmins in this country in summer season. People seldom drink in other seasons. There are people who are addicted to bhang, and such men drink it as beverage throughout the year. The number of bhang-drinking men is so small that no percentage can be noted.

25. The use of ganja is on the increase. The principal reasons are—

(1) Increase of population every year.

(2) Owing to increase of ganja shops in villages, the use of ganja is also increased. The increase of shops every year facilitates gratification of desires of smoking classes.

(3) Association with ganja smokers.

The use of bhang appears neither on the increase nor decrease.

28. Ganja—

(a) Within one tola—cost 1 anna.

(b) Two tolas—cost 2 annas.

Bhang—

(a) Within 1 tola—cost 9 pies.

(b) Two tolas—cost 1 anna 6 pies.

29. (a) Ordinarily tobacco is mixed with ganja by all classes of consumers; (b) dhatura is rarely used by bairagis.

The object of admixture is good relish and facility of burning.

Bhang massala generally consists of black pepper, badam, cardamoms, cucumber seeds, somph, kausni, gulab flower leaves, sugar, and milk.

30. It depends upon the number of persons composing the company. Boys above fifteen years commence smoking ganja, and children drink

bhang and do not smoke ganja. Females never smoke ganja, except among bairagis.

31. Yes, it is easily formed in company. Yes, it is somewhat difficult to break it off soon. The easiness or the difficulty depends upon the formation of habit. If a man smokes occasionally, his habit can be broken off easier than that of a person who is a regular smoker. There is a tendency in these drugs for moderate habit to develop into excessive.

32. As far as my experience goes there is no custom, social or religious. Almost all the bairagis (religious mendicants) are addicted to ganja smoking, and the real object is to concentrate their mind in devotion to God.

33. Respectable and educated people regard ganja smoking as bad. The public opinion is against it, as viewed from social standpoint. I think that the use of ganja is in disrepute, and the sentiment is attributable to the fact that it spoils health and renders him indifferent and careless towards his worldly duties. Moreover, a ganja smoker loses trust. It does not cause so much harm to bairagis. I do not know of any custom of worshipping.

34. I think it would go very hard with bairagis and gosains to forego the consumption of ganja. The reason is that they are habitual smokers and they have very little worldly cares and anxieties. They can't drink liquor or eat opium, and so they require ganja as a matter of necessity for concentration of mind.

35. Yes, for some time the drug would be consumed illicitly. Prohibition can be enforced by abolition of shops and stoppage of ganja supply, as well as abolition of its cultivation. The prohibition would certainly occasion serious discontent among the consumers. But it would not amount to a political danger. Yes, there is probability of the prohibition being followed by recourse to liquor and opium.

39. Ganja smoking is much more injurious to health than the drinking of bhang. The latter form, if well prepared, cools the body and keeps up a man's spirit. The former causes great heat and makes a man weak.

Bhang is prescribed by the school of native physicians on account of medicinal qualities. It is chiefly used in medicines given to remove nervous debility. In the treatment of cattle disease also it is used.

41. Yes, use of ganja and bhang.

(a) Bhang drinking.

(b) Ganja smoking.

(c) Ganja smoking.

All labouring classes and artisans. Moderate habitual use.

43. Yes. They are inoffensive (ganja smokers).

44. The immediate effect of moderate use of ganja on habitual consumers is intoxication, allays hunger, creates appetite after 20 minutes. The effect lasts one hour. The after-effect is laziness.

The immediate effect of bhang is refreshing, slight intoxication, good appetite. The intoxication lasts three hours. The after-effect is exhaustion.

45. It impairs the constitution in the long run to some extent. It does not cause loss of appetite. It causes bronchitis and asthma if good quantity of ghee is not taken.

47 and 48. No.

49. Excessive use of ganja for a long time, without nourishing food, would produce impotence.

51. No. Few ganja smokers will be found among bad characters. Moderate use does not tend to commit crime.

52. As above.

55. Very rarely done. Yes.

63. The present system is working well, and I have no objection to it.

65. The taxation of ganja is reasonable. One tola of ganja satisfies ten persons at one time, and its cost is 1 anna; whereas 10 annas liquor would satisfy ten persons at one time.

67. I have no objection to the present method of taxing ganja.

68. In this division there are no licensed houses for the sale of these drugs.

69. No, the wishes of the people are not consulted before a shop is opened. The neighbouring contractors are consulted; and if they have no objection to the opening of the new shop or their objection proved useless, it is opened. Public opinion is unnecessary. The present method is good.

20. Evidence* of MUNSHI THAKHT SINGH, pensioned Tahsildar, Hattu, District Damoh.

1. Entered Government service in 1836 as Assistant Record-keeper. Rose to be Naib Tahsildar and Tahsildar. Was also Superintendent of Settlement. Retired in 1880. An Honorary Magistrate.

2. Bhang is imported in small quantities from Upper India (known as duba bhang); charas is unknown. Ganja (the flat kind) is obtained from Nimar. Broken ganja is not sold separately.

19. Ganja is only used for smoking, i.e., the flower part, rejecting the stalk and leaf. Majum, which is prepared from ganja boiled in ghee, is eaten. The leaves of ganja are used in place of bhang when the latter cannot be obtained.

20. Charas is unknown. Ganja is chiefly used by the lower classes and castes. It is used by all who have to do hard manual labour. Very few such could be found who don't use it.

21. Only the flat kind.

23. No.

24. Knows of no such practice as bhang eating. It is drunk by all castes and by respectable persons in all places. Its use is confined to the hot weather as a cooling and refreshing beverage and as an inducer of sleep.

25. The use of ganja is not decreasing, rather increasing. I do not think the stoppage of its cultivation under license in every district has decreased its consumption.

27. See answer to 20. It gives a man an interest in his work, and enables him to work harder and longer. The effect of a chilam lasts for four or six hours. Hard manual labour chiefly leads to the practice.

* Translation.

28. (a) One chilam or two chilams a day cost a pie or less.

(b) Can't say.

29. Ganja is smoked with tobacco. Bhang is drunk in water with saunf, kasni, pepper, rose leaves, saffron, kakri seed; dhatura never used.

For majum, ganja or by preference bhang, is boiled in ghi, and cardamoms, pepper, saffron mixed. The ghi, after the ganja (or bhang) is taken out, is allowed to harden, and is cut into cakes for eating. Used especially at the Holi festival.

30. Chiefly in company. Women and children do not use it.

31. The habit (ganja) is difficult to break off. No one does break it off except in jail. Why should they try and do so? I do not think a moderate smoker would necessarily develop into an excessive one.

33. Bhang is by no means held in disrepute. Ganja is among respectable classes. Reason is that former is not used to induce intoxication, but the latter is so used. Never heard of plant being worshipped.

34. It would be a serious privation for a man to lose his ganja. He would be unable to do his ordinary work.

35. The use of ganja could not be stopped. People would get it as they do now from native territory. People will have some kind of stimulant. Thinks that liquor drinkers and opium or madak consumers are separate classes from each other and from ganja smokers. A man deprived of ganja would not derive satisfaction from liquor or opium. But if one be abolished, the consumption of the others would increase.

36. No.

39. Smoking ganja is more injurious than drinking of bhang or ganja leaf decoctions. Never heard of any bad result of the latter.

40 Bhang is sometimes used as a medicine for men and horses, not for cattle.

41. (b) A moderate use of ganja (and also bhang) is good.

43. Yes.

45 and 46. Habitual excessive smoking is bad; induces asthma in old age and dimness of sight. It weakens the intellect, but never heard of its inducing madness.

Habitual moderate use will have the same effect but in a less degree; perhaps in some cases no result at all.

53 and 54. No; excessive ganja would make a man foolish and not foolhardy.

55. No, it would not induce stupefaction like dhatura.

58 and 59. Has seen two excise systems before the present—

(1) Unrestricted cultivation.

(2) Cultivation by license in any village in any district.

Thinks this latter system should be reintroduced. Consumption of ganja can't be stopped and should not be. It is a necessity for the poor man who has to live by his muscles. At present all the profit goes to the Native States; thinks the Government should try and intercept this; cultivators also lose a profitable crop. If the sale of ganja is stopped, it will be smuggled more than it is. Smuggling and consumption of ganja can always be carried on secretly, without difficulty.

70. Smuggling of ganja goes on very largely, especially in the Hatta tahsil (where witness lives) which has Native States on three sides and separate villages interspersed. Much ganja is grown there simply for importation into British districts. The price in Native States is 1½ seers per rupee. Here the same amount of Government ganja would cost Rs15. A good many men are caught, but for everyone who is caught, there are ten who are not. Doesn't know if the ganja licensed vendors are the principal smugglers, but thinks it probable. Does not think average consumption less in this district than in Native States. It is not possible to distinguish smuggled ganja from Government ganja.

Oral evidence.

Question 20.—It is true that no labourers abstain from ganja, and that they work well upon it. This is true of the tahsils in Saugor, Damoh and Jabalpur in which I have served.

Question 25.—Notwithstanding the rise of price in ganja, the use of it is increasing. Smuggling also is on the increase, especially from Punna, Ajeagadh, Bijawar, Charkari into Saugor and Damoh. People cannot reduce their consumption of intoxicants, and the number of consumers is constantly receiving addition with the increase of population. Mr. Nicholls was persuaded that the hemp drugs were deleterious, and he hoped to reduce consumption by increasing the price. By measures adopted in his time cultivation was checked. Formerly ganja was cultivated in Saugor. I myself gave licenses for cultivation in Hatta. It was cultivated in Magrun village in the Saugor district and in the Damoh district. There was also much desultory cultivation. In spite of raising the price, consumption was not reduced. There is very imperfect control across the border, and prices are low there.

Question 34.—Ganja is necessary to the workman who is accustomed to it.

Question 35.—If ganja were prohibited in States as well as British territory, people might find other means of intoxication, such as dhatura. I am not aware that dhatura is used at present. When bairagis and such people are entertained, they are generally given money to buy ganja. Those who are not liquor-drinkers would not take to liquor. The hemp drugs are an old stimulant. They do much good to the people. It is a matter in which Government need not interfere.

Question 45.—I have not seen any cases of people becoming insane through ganja, nor heard of any. The intoxication lasts but a short while. Consumers are affected in their intellect, but it does not go as far as madness. I have never heard of people becoming insane through use of dhatura, but the intoxication of dhatura is very violent. I have heard of men getting tremblings from liquor and even dying.

Question 59.—The advantage of the change I propose is that the people will get the drugs cheaper and in greater quantity. At present the price is a heavy burden upon them. The hemp drugs are cheap in the Native States compared with British territory, and still the consumption in British territory is not less than across the border. This is due to the prevalence of smuggling, and to the fact that the people will have ganja.

* Translation.

21. *Evidence of CHINTAMANI NAND VIDYĀ BHUSHANA, Uria Brahmin, late
Tahsildar, Sonampur, Sambalpur.*

10. The persons who cultivate hemp for its narcotic properties do not form a special class in this side. They are of the same classes as other agricultural cultivators.

16. The bhang is generally prepared in their houses. It is called kúsumba in this part of the country.

23. Yes; it is also used for smoking. It is so used by the bairagis in all parts of India generally.

29. The consumers of bhang mix pepper generally and other articles for the sake of physical benefits. Sometimes dhatura is mixed with a view to make it stronger.

30. The consumption of ganja either in smoking or drinking, is chiefly practised by the male sex and at any time of life, excepting childhood. Children generally do not consume any of these drugs.

31. As to the habit of drinking bhang, it is not easily formed. Of other kinds I have no knowledge. There is no difficulty in breaking off the habit of a moderate consumer of bhang.

32. According to the aphorism of Tantra (Shashtra), the use of ganja as a drink is regarded as a religious custom by the Shaktas, a sect of people devoted to the Hindu goddesses; while worshipping they necessarily drink it. On ganja there are some treatises. The known work on it is "Sanat Kumar Sanhita," which treats purely of ganja drug and its use, and of the effect produced by its use on the consumers. In that work ganja is called "vijaya" or invigorating drug and "sambit" or educator. It may also be found in some Tantras that no worship can be performed without using ganja. It is used because its use makes one's mind composed. It is regarded as essential in Tantras, but not in society. The use of it in Tantras is generally temperate. If used excessively, it becomes injurious to health and changes one's temper. It is used as essential in the worship of Hanumán and Bhairav.

32. All the devotees may accept that the practice of taking ganja is in the rules of Tantra Shashtra. The excessive use of the narcotic drug is generally in disrepute, and people call him "ganjiá" who consumes it with unusual excess.

34. Those consumers of bhang, either smokers or drinkers, will seriously feel privation of ganja if they will have to forego its consumption.

35. It would be in no way feasible to prohibit all of these drugs. As to the prohibition of any of these, the consumers will take recourse to one or the other part of it if one part be prohibited. The prohibition of all parts cannot in any way be given effect to. The prohibition will surely and certainly occasion serious discontent among the consumers, which may amount to political danger.

36. The prohibition of ganja would be followed by recourse to alcoholic stimulants by those in whose society there is practice of taking liquor. But by the others recourse will be had to other drugs, such as roots, stems, or leaves of narcotic jungly plants. I observed that in Patna some persons satisfied their desire by the use of some jungly substance which was known to them when ganja could not be had.

40. As to the use of ganja, the following has been prescribed in the treatise on medicine on ac-

count of its medicinal qualities. The names "bhanga, ganja matuláni, madini bijayá, jaya, and shakrášana" are given to this drug. Bhanga is destructive of asthma; costive, digestive; productive of "pitta," stupefaction or intoxication. It is light, sharp, warm, produces activity in speech, increases appetite, destroys leprosy, creates strength, furthurs sense, and in its constant practice it allays the effects of old age and diseases; makes the body long lasting. One more name "trilokya vijayá" is given to it, and it is mixed with many sorts of medicines, such as modaka (pills), chūrna (powders), and is also mixed with "bhasmās," such as banga, etc., in order to reduce it to ashes. If regularly used, according to the Shāstras, it keeps the state of youth firm.

41. The moderate use of ganja is beneficial in its effects as (a) digestive. (b) The drinking and smoking of ganja, as the peasants say, are beneficial to alleviate fatigue arising from the excessive work and exposure to rain and cold. (c) It cures dysentery, and is to some extent preventive of cholera if used with some medicine. It has been observed that when cholera prevails in any place, many of the people residing therein generally take ganja with a view to pass off fear. The agricultural class mainly use ganja for the purposes mentioned above under (a) and (b) of this question, and the common people for the purpose mentioned under (c). I refer to moderate habitual as well as moderate occasional use.

42. The moderate use of ganja is beneficial, and, if not beneficial, it is harmless.

43. The moderate consumers are not offensive to their neighbours.

44. The immediate use of ganja, if moderate, is refreshing and productive of bravery in the brave and cowardice in the timid. Instead of allaying hunger, it creates appetite. It has been noticed that Brahmins use ganja before dinner with a view to have good appetite when they are invited to a feast by somebody, or they are supplied with cups of kúsumba by the host. If moderately used, its effect lasts for an hour or an hour-and-a-half. If used excessively, after creating a great amount of hunger, it allays it, and the effect lasts for a day or a day-and-a-half, when by constant bathing its effects are removed. In case the quantity used by the habitual consumer, whether moderate or excessive, be less than usual, they feel uneasy.

45. The moderate use does not produce any noxious effects, except that it produces the effect (physical) of reddening the eyes and mental effects of making the consumer a little lazy—i.e., it causes a tendency for sleeping. Instead of causing dysentery, bronchitis, or asthma, it cures them. If rāsayana called kalpa of bhang is made use of, it produces immorality with indulgence in sexual desire to some extent. It deadens the intellect if excessively used, and causes temporary change in disposition. It as well causes temporary insanity. If the restraint be removed and the use of ganja allowed, the symptoms of insanity reappear.

49. The use of ganja instead of producing impotence destroys it.

51. No. They don't form bad characters. Sometimes their temper is a little changed.

52. Somewhat or little change in their disposition becomes apparent in the excessive consumers.

53. The excessive indulgence in ganja incites sometimes to unpremeditated actions, but not to crimes of a violent nature.

54. I don't think they are so used.

55. No complete stupefaction is caused by this drug if unmixed with other drugs.

56. According to treatises on medicine, ganja, if mixed with different kinds of medicines, different sorts of effects are modified.

57. Many drink ganja and a few eat it. I am saying all about ganja drinking. It is taken

both in the morning as well as evening before dinner. When ganja excessively excites the consumer, he is made to take sour eatables and drinks, and to bath constantly when he becomes extremely excited. He is caused to take "harra" in order to cause the drug to be vomited.

58. Looking to the condition of our province, I think that the excise administration is working well.

65. I think the taxation of ganja, etc., is reasonable.

22. Evidence of VINAYAK BALKRISHNA KHARE, Brahmin, Excise Daroga, Nagpur.

1. My occupation as Excise Daroga for the last 8 years, especially in the Nimar district in which ganja is grown, constant inspections of shops, interviews with ganja contractors and ganja smokers in the course of my tours, and the special enquiries made last year under orders of Government, have afforded me abundant opportunities to study this subject.

2. There is only one kind of ganja manufactured in these provinces, and that is "flat ganja." This article is locally called "pathar ganja." The process of manufacture defined in Dr. Prain's pamphlet for "flat ganja" is exactly the one adopted in these provinces. Bhang is not grown here, but is imported either from Malwa or North-Western Provinces. Charas accumulates on the palms of hand (being resinous substance) when harvesting ganja. It is collected, but is at once destroyed, as its sale is not permitted in the Central Provinces.

3. So far as I know, in no districts of the Central Provinces wild hemp is grown.

4, 5 and 6. Since it is as above, these questions require no answers.

7. Yes. For only (a) and (d) (seeds), and in the Nimar district confined only to about 100 villages more or less, in the Khandwa tahsil, covering an area nearly 1,000 acres.

A statement of the past five years is given below:—

Year.	Number of licenses.	Area under cultivation.
1888-89	574	833
1889-90	699	1,466
1890-91	408	833
1891-92	474	653
1892-93	697	940

8. There was a great increase in the year 1885-86 in area, number of licenses, and number of villages, owing to the high rate per maund obtained by the cultivators in the preceding year from foreign traders; but the influx of the commodity in the market in that year and the limited demand for the article disappointed the cultivators when they found that their labours were scarcely paid by the return their field produce brought. The following year showed a great falling off and continued stationary up to the current year, when there is a little increase on account of the preceding year's high prices obtained by them. Its increase or decrease depends upon the demand.

9. Please see separate memorandum sent by the Commissioner of Excise, Central Provinces.

10. There is no special class of cultivators for the cultivation of ganja. The ordinary agriculturists do it.

11. No. Not from wild hemp seed.

12. No answer, as wild hemp is out of question for these provinces.

13. Yes, to Nimar district, Khandwa tahsil. There is no particular reason why it is permitted in Khandwa, except that the cultivators there have been sowing it for years past, and when asked to name the period, they say their grandfathers used to say that they learnt it from their grandfathers. It is certain that ganja crop requires moderate rain and good water soaking soil. Ganja was also grown in the Katol tahsil of the Nagpur district, of which the land is said to be suitable, but since 3 years cultivation is prohibited there as the drug produced in Nimar is much more in excess of the provincial demand, the surplus being annually exported to some districts in the North-Western Provinces and Native States in Central India. I don't think the cultivation would be impossible except for the careful examination of the ganja growing plant.

14. Yes, (a) ganja, (b) charas, but this is not collected nor sold. In Nimar about 100 villages, 1,000 acres more or less. Produce between six and seven thousand maunds.

15. Please see separate note sent by the Commissioner of Excise for the province: one kind only is prepared for all purposes.

16. (a) No answer, as bhang is not produced in the Central Provinces.

(b) No.

(c) No knowledge.

17. By the ordinary cultivators.

18. Bhang is imported and consists of dry leaves without any resinous substance. I have seen bhang stored in the ordinary way for four years without deterioration or losing its quality. Charas is never kept, and I am unable to say anything about it, but ganja deteriorates and loses its quality after two years, the resinous substance having dried or disappeared from it. I do not think it will hold good after that period with any amount of care.

19. Ganja and charas are used in smoking. Majum (one of the names for a form of intoxicant made from hemp) is prepared from ganja, and it is eaten as a luxury generally by all classes of people. There are also habitual majum eaters. I saw in Nagpur during the last Moharam festivities that it was indulged in even by young children who came with their parents to see the tamasha from outside. It is also indulged in during the Holi festival of the Hindus. It is sold throughout the year at the head-quarters of the districts generally.

20. The following classes of people generally make use of ganja in smoking, viz: (1) Hindu mendicants of all grades; (2) the Muhammadan fakirs; (3) labouring classes on the railways and agriculture and others; (4) a few agriculturists;

(5) a respectable number in the middle class, educated and uneducated. There are many others who are too numerous to enumerate. But the above form the principal communities of smokers. They can smoke charas if they get it.

21. On this side of the country, Central Provinces, Central India, and the southern presidencies, flat ganja is smoked, as I think the people only know that kind.

22. I have no knowledge of charas being imported, at least in the Central Provinces.

23. Bhang is never smoked.

24. The consumption of bhang is by no means restricted to the poor. On the other hand, it is drunk by Marwaris and banias on this side, and during the hot season by respectable high caste and educated Brahmins of the orthodox class who are restricted from taking liquors. Such a preparation is generally called "panga," meaning light drink. There are such drinkers of this preparation in Malwa and in the North-Western Provinces, notably Benares, that they can drink off at one sitting 1 or 2 seers so thick that it is called "sikia dub," i.e., if a straw is thrown into the pot filled with this kind of preparation, it stands straight. This preparation cannot be drunk by an ordinary drinker without subjecting himself to serious consequences. Moreover, some people are so fond among that Brahminical class that they take pride in preparing and consuming the strongest dose in other ways, namely, that the bhang patti is boiled in water in a copper pot and a couple of copper pice put into it while undergoing that process. It is then roasted in ghee and then powdered along with almond, aniseed, pepper, dry rose flowers, seed of cucumber, and all these mixed in water, or, to make it still stronger, to prepare it in milk which they call "dudhiya," and then to drink it. I drank such a preparation myself once through not knowing the way in which it was prepared. I cannot describe in what state of mind I was thrown for about 36 hours, when the intoxication subsided. On the Ghats of the Nerbudda at Onkar, Mandlesar and Mahesar, and on the Ganges at Benares, and on the Kshippra at Ujjain, this bhang preparation is so common and so often resorted to that the stones there bear deep marks. The learned Brahmins at Benares and Ujjain are noted for indulging in this drink, and through the instrumentality of the intoxication produced by it, they can repeat the Vedas without a mistake and without being fatigued.

Eating bhang is rare among those habituated to daily drink, but they do so sometimes for convenience sake when going on journeys. I have seen a man eating 1½ lb of bhang dry and unprepared, when he found himself in trouble for possessing more than the authorised quantity, and thus escaped punishment. Preparation for drinking involves great deal of trouble and labour and cannot be secretly done, and in such cases those who do not like to undergo that trouble, and others who have some fear from their elders at home, keep a preparation for eating.

25. If the official statistics are seen, the use of ganja seems to be on the increase, but I attribute this increased consumption to be due to severe check on the smuggling from Native States and other places in British India. In the former case, there is no effective check as in these provinces on the cultivation of hemp drug, sale of monopolies and every other thing connected therewith is all uncontrolled. Similarly, in the British districts out of the Central Provinces, as in the Berars and

Bombay, the drug is sold much cheaper than in the Central Provinces, and the facilities afforded by the railways are great for smuggling. I expect still more increase in sales if the system of taxing the drug becomes uniform and the same system is adopted by the adjoining Native States. It is impossible to detect every smuggler without subjecting him to search, and thereby cause vexation, molestation and risk (*vide* section 45 of the Excise Act). I can speak from my own experience that there are people in good position, whose names I do not like to disclose, and whose avocations take them in the daily course of their business to such Native States and other districts, wherefrom they import the drugs for their friends in respectable positions. Their actions pass undetected. If all these sources are stopped by making the tax uniform throughout, there will no doubt be still more increase in sales to the disgust of the advocates of the abolition of the hemp drugs. The number of smokers is not, however, increasing.

26. The majority of ganja smokers will go under class (a), as each and every person has to earn his living, which he cannot do if he becomes a habitual excessive smoker. Besides, the classes I have enumerated in answer to question No. 20 are those who cannot afford to pay two annas a tola to make them excessive smokers. Their earnings are shared by several calls on them. The mendicant and fakir classes are such as can be classed under (c), as their hand is always ready to welcome a chilam (pipe) of ganja if one is given every hour. They have no care for their living, as they beg from door to door, and a couple of hours' rambling satisfies their want. The well-to-do and charitable people have respect and sympathy for them, who spontaneously supply them this drug without cost, and very often at such places where these men stay, idle men addicted to ganja smoking congregate there who enjoy smoking in company with them.

Under (c) may be classed those mentioned in No. 5 of the list against question 20 and those beginners who enjoy their company on such occasions, though not properly speaking habitual or occasional consumers, yet through the pressure of their friends partake it, and thus gradually become habitual moderate consumers. I cannot class any body under (d), as occasional moderate consumers cannot go to excess. A habitual moderate consumer can smoke two chilams a day. Idle fellows who can afford to pay for the drug, and who have no anxiety or care to earn their living, can smoke six or seven chilams a day, and such people have always a company to serve. An ordinary chilam can serve four or five persons, and unless there is a company there is no pleasure. Habitual moderate consumers will not ordinarily collect a company daily, but will do so in a way which the next-door neighbour will not know of. I do not call those people excessive consumers who have become habituated to it, although I have classed mendicants as such.

27. (a) From labouring class.

(b) From religious mendicant class.

(c) From superior middle class.

(d) Nil.

For (a), after taking a small quantity of drug, a labourer can work indefatigably or carry load without requiring much food. So the drug like alcohol becomes a highly concentrated food. Their small earnings necessitate them to resort to this practice, which enables them to observe economy and to possess sufficient energy to work.

For (b) indifference to the worldly affairs and conduct of life, without caring for the morrow.

For (c) luxury.

28. For (a) 1 anna, half a tola, with ease, and even with that can treat one or two friends; and for (b) it is uncertain. It depends upon the company, but if he smokes alone, 4 to 6 annas will amply satisfy him.

29. Tobacco is invariably mixed with ganja. Dhatura stupefies a smoker, and it is therefore not mixed unless there is some object in view. The necessity for mixing tobacco is occasioned by the fact that before ganja is brought into use, it is required to be thoroughly washed, in order to remove its bilious quality, and all water dropped by pressing the drug with all force on the palm of the left hand by the right hand thumb. This done, the ganja still remains in wet condition and difficult to be burnt, and therefore the admixture of tobacco helps it, if any seed, kadi or patti, are

10 to 12 grains of pepper.

4 or 5 almonds.

2 cardamoms.

$\frac{1}{4}$ of a tola rose flower dry.

About 10 seeds of cucumber.

$\frac{1}{2}$ a tola aniseed.

1 lb sugar.

allowed to remain, they produce phlegm. Bhang is never prepared without massala, and the proportion of ingredients, as given in the margin, are required for 5 tolas of bhang preparation.

30. (a) in question 27 generally consume it in solitude; (b) and (c) in company.

It is confined to males. Public girls who do not keep the profession of singing occasionally smoke ganja. Children never smoke, nor are they permitted to associate with ganja smokers, but occasionally they are given a little bhang even by their elders if any happens to be present at the preparation. Bhang is generally drunk in company of other friends unless there be no one to join him.

31. Beginners generally tremble at its name and do not easily take to it. It gradually becomes a habit, when he constantly associates in the company of smokers and is pressed to smoke. Ganja smoking is not a permanent habit as that of opium. It can be given up at pleasure if one determines to do so. Of course for a few days he will miss the habit. It is possible for a moderate consumer to gradually grow into excess.

32. I am told by pundits that mention of this drug is made in the Vedas and Shastras. I cannot, however, speak with authority in connection with its use religiously, but I can speak with confidence that it is no doubt a long-standing custom to offer the preparations of this drug (ganja and bhang) to our great god the "Shiva," and no smoker or drinker will use it unless he offers it first to that deity. On the Shivratri day on Mahabaddi 13th it is a custom to prepare bhang, and with that bathe the god "Shiva," which is regarded as an essential. It is the day from which occasional habitual drinkers generally begin to use this drug for the hot season. It is no doubt temperate, and is not likely to lead to a habit or produce injurious effects, as the class who resort to it are business men of the middle class.

33. Those who do not ever touch it regard the practice as a vice, and it is therefore condemned by them. In this respect "charas" stands first.

Ganja smoking takes the second place, and bhang, though it produces a more lasting intoxication, still it is not considered disreputable by the drinking or non-drinking class. The total abstainers call ganja smokers as "ganjakas,"

bhang drinkers as "bhangad." The consumers themselves cannot be expected to regard it as a vice.

There is no custom of worshipping the hemp plant.

34. Certainly those who are habituated to it will deeply feel if this drug is denied to them. I think they will rather go mad without it than with it. Habit is second nature, and it must be attended to. The classes which will mostly feel are mendicants and labouring classes chiefly.

35. It will not be advisable to prohibit the use of any of these drugs. If they are denied licitly, the consumers will certainly have recourse to obtain it by illicit means. Unless the growth of hemp drug is entirely abolished, the use of the drug will not cease. If, on the other hand, it is abolished in one part of the country under the British rule and not interfered with in the Native States, it will be extremely difficult to enforce prohibition; and if such a prohibition is announced there will be a great discontent among the people whose interest is at stake, and they will cry inside their homes and quietly bear it, and will sit to think over the matter to contrive means to satisfy their appetite; and if they fail to succeed in their attempts, in my humble opinion, it must eventually result in political danger, which at the present moment cannot be anticipated. My idea about these intoxicants is that a habitual consumer can forego his meals once, but not his usual allowance of drug.

Of course those who have restrictions for liquor will not like to take to it, which must necessarily be in violation of his caste rules. Opium is a dull intoxication and a costly one, and which cannot be given up as others. I do not know then what other article would take the place of this drug.

36. I have never found that a ganja smoker has given up ganja and taken to liquor. On the contrary, the authorities had reason to suspect that the case was quite the reverse, since increase in consumption of ganja was noticeable year after year. Since the introduction of the new system of taxing liquor in these provinces, liquor is sold much dearer than before. Its price is nearly doubled and if the system is extended to the remaining districts, and outstill system altogether abolished, as is done in two districts, there is no chance of people going for that article in preference to their habituated drug. Besides the one great bar for the majority of them is their caste prejudice.

37. Yes. I have no personal knowledge of the effects from smoking charas, but I had experimented once upon my two friends. I had got this drug (charas) from Babu Bisumbar Nath, a well known contractor in the North-Western Provinces, and my friends smoked it. I do not know if they had mixed tobacco with it. They smoked the chilam twice when I left, and when I saw them the next morning they told me that the drug was very much active and kept them in an intoxicated state for upwards of ten hours, making them giddy, while the effects from ganja smoking are much milder. The intoxication does not last for more than two hours, and keeps the smoker in good humour. One of them is intelligent, English-knowing, and is a pensioner. He smokes, drinks and eats all these drugs, and an evidence of such a man may furnish valuable information.

38. No knowledge, as only one kind of ganja is prepared here and sold.

39. I would give preference to smoking ganja. Charas, majum and drinking bhang produce intoxicating effects stronger than the first, and which last longer. Excepting charas the effects from the other two preparations are in no way injurious to the health, so far as I have ascertained in my own case.

40. I have never enquired on this point from native doctors, but the consumers say that their use protects them from malaria, bad effects from water, effects from different climes and places, and effects from closed bowels, respectively. I do not know if any of them is used in the treatment of cattle disease. It is, however, at times administered to a patient to relieve him from incessant pain for a time.

41. The consumers say that these preparations possess all the qualities enumerated in (a), (b) and (c). For this reason only the labouring class use them moderately. The mendicant and fakir classes being constant wanderers use them also for qualities mentioned in (b) and (c). I refer to the moderate habitual use.

42. It is beneficial, as stated in answer to question 41.

43. Ordinarily, they are inoffensive to their neighbours. But if they are unnecessarily spoken to or reproached they will fall out.

44. Five or six minutes after a chilam is smoked signs of intoxication begin to appear. After about ten minutes it produces forgetfulness, a thought coming momentarily and followed by a host of other incoherent thoughts, the original thought being quite banished, and forgetting all worldly cares. After about fifteen minutes one thinks to be moving up and down. Mouth gets dry and the tongue is felt to be dragged inside, which is followed by a dislike for light, and inclination to lie down. After a couple of hours the intoxication subsides. Similar effects are produced from drink of bhang, but its effects are much longer. Bhang is refreshing, produces intoxication. I have no information to answer the remaining questions.

45. (a) No.

(b) No.

(c) I don't know.

(d) No.

(e) Not to my knowledge.

47 and 48. No, it is not hereditary.

49. No. Prostitutes occasionally use it. I think it must be injurious. It does not produce impotence.

50. Excess of anything is bad.

51. I cannot say; there is no connection of moderate use of the drug with crime of any type.

52. I am unable to say anything on the point.

53. No. Never have I heard of any such occurrence.

54. No.

55. (a) Yes, but not without the admixture of "dhatura."

(b) No.

56. The admixture of dhatura with ganja or bhang will completely stupefy a moderate consumer and may cause danger to life when it is done in excess. Cases have occurred in which ganja mixed with dhatura was administered to persons with an object to rob them of personal ornaments.

57. I have not seen ganja being eaten except in majum, and the effects of majum are already stated.

58. I am thoroughly acquainted with the administration of hemp drugs in the Central Provinces and it is satisfactorily working. No improvements are necessary.

59. No answer, as no improvements are necessary.

60. Of late years certain improvements have been effected for watch and ward of cultivation and manufacture. The establishment allowed is, however, inadequate to watch so many fields sown with ganja, and in my opinion the fields so sown ought to be fenced, so as to prevent ingress of other persons unconnected with cultivation. The manufacture ought to be carried on in an enclosed place and watched more closely and vigilantly.

61. Charas is not produced in the Central Provinces.

62. Bhang is not produced in the Central Provinces.

63. The present system in respect of ganja is good in all respects, but I do not understand why the sale of bhang is confined to be sold in retail by the wholesale vendor only, and at headquarters of the districts and tahsils where a wholesale vendor is bound to keep an agent. It is sold at Rs. 3 a seer to the public by retail while ganja is issued at the same rate to the retail vendors only, who, in their turn, sell it to the public at a rate varying between 5 and 10.

64. The present arrangement is very good. Import of ganja is not permitted.

65. With due consideration of the intoxicating quality of each of these three drugs and also of the other drugs and alcoholic intoxicants, the present rate of taxation is reasonable (I take the present tax on liquor for comparison). But I do not see why on bhang the tax should be so low as compared with ganja. There is a large gulf between the retail rates of bhang and ganja.

66. I cannot say anything on the point.

67. Having regard to the station in life of the majority of the consumers, the present tax seems to me to be already high, but as the consumers have become accustomed to it for the past eight or ten years, I do not think any reduction or increase in the present tax advisable.

68. The standing rules are that no drug is to be consumed on the shop premises. Such houses ought not to exist, and the prohibition is sound.

69. The present rules do not require any consultation, but great care is taken in fixing the localities of the shops with due consideration of public conveniences. Hitherto no objection has been taken to the location of any shop in any place fixed by the Collector, and besides the drug is not permitted to be consumed on the premises of the shop. I think the rule regarding liquor shops should be extended for sale of drugs too.

70. Smuggled ganja is imported in small quantities from the Native State of His Highness the Holkar, as stated in answer to question 25, but this allegation cannot be substantiated by proofs. Consumers themselves use smuggled ganja in the north-western part of the Nimar district, which is intermixed with that territory, and where our shops are not purchased. Ganja issued from Government stores for consumption in the province is duty paid.

23. *Evidence of ANANDI PERSHAD, Excise Daroga, Hoshangabad.*

1. I am serving as Excise Daroga in the Central Provinces since the year 1864. I, therefore, while on tour, had several opportunities to come into contact with and receive information from the licensed contractors and vendors regarding the hemp drugs. I have also gained much experience during my long service of 29 years in the Excise Department. I therefore pass my opinion with regard to the intoxication and the system of management of the drug as my experience teaches me.
2. Charas is not produced in these provinces, therefore its information in detail will be known from Punjab people. Flat ganja is produced in these provinces, which is defined in the question. Round ganja is not made in these provinces. The flower-tops of flat ganja when detached from the twigs form the broken ganja, and it is correctly defined. In these provinces these products are known as "flat ganja" and "broken ganja."
3. In the capacity of Excise Daroga I had been in Jabalpur, Saugor, Damoh, Narsinghpur, and Hoshangabad districts. In none of the aforesaid five districts hemp plant grows spontaneously. It no doubt grows so in Punjab, therefore its full information can be had from the inhabitants of Punjab.
4. The ganja, that is made from the hemp plant is, in these provinces, known as "flat ganja" and "broken ganja" which are defined in question 2.
5. Wild hemp does not grow in these provinces, therefore I am unable to say anything about it.
6. As wild hemp does not grow in these provinces, so I cannot say about it.
7. (a) Hemp, in these provinces, is cultivated in tahsil Khandwa, of the Nimar district.
(b) Charas is not produced in these provinces.
(c) Bhang is imported from Rajputana.
Its amount of production will be known from Khandwa.
8. Statement of hemp cultivation will reach your office from Khandwa. It shall clear everything.
9. The correct answer for this will be had from Khandwa.
10. Hemp cultivation is not restricted to a particular class. Cultivators of all classes do it.
11. As the wild hemp is not cultivated in these provinces so its seed is not used.
12. As the wild hemp does not grow in these provinces so I know nothing about it.
13. Hemp cultivation in these provinces is restricted to tahsil Khandwa of the Nimar district only. Hemp of superior quality is produced there. It so abundantly grows there that it is not only sufficient to meet the requirements of these provinces, but it is exported to North-Western Provinces, Oudh and Bundelkhand Feudatory States also. Therefore special arrangements are made for godown there and its cultivation is prohibited in the other districts. Other information regarding the soil, rainfall, etc., will be known from Khandwa.
14. In these provinces hemp is cultivated in tahsil Khandwa of the Nimar district. Charas is not produced. Bhang is not produced in these provinces. It is imported from Rajputana and Ajmere. The amount of hemp cultivation will be known from its statement from the Nimar district.
15. Wild hemp does not grow in these provinces. Hemp is produced from the cultivated seed at Khandwa. It is smoked like tobacco. They also eat it with sugar and ghee.
16. They, as a rule, do not make bhang in their own houses, because its cultivation is prohibited. Bhang is not produced from the hemp plant. It is imported from Rajputana, Gonda, Bahraich in Oudh. Wild hemp is not cultivated in these provinces.
17. In Khandwa, every class of tenant cultivates hemp, and generally the grocers and confectioners make majum.
18. I cannot say anything about charas, as it is not produced in these provinces. Ganja and bhang deteriorate if they are kept for one year. If ordinary care is taken, it can remain safe for two years, but becomes less effective. Damp soon deteriorates it. There are no special measures to prevent its deterioration, but it remains safe in wooden boxes and baskets of bamboos; otherwise after one year it becomes less intoxicating and its colour is changed.
19. Like tobacco, ganja and charas are smoked; otherwise hemp is at first powdered and washed with water; water is then extracted out. Afterwards they mix dried tobacco with it and smoke it. In the other way they make majum of ganja and eat it. It is prepared with ghee and sugar. It is used in these provinces very freely, especially in the Holi festivals.
20. They do not smoke charas in these provinces. Ganja is generally much consumed by the fakirs, gosains, sailors, water-carriers, shoemakers, palanquin bearers and other menial classes. Persons of high caste very seldom smoke it. The number of hemp consumers is about 5 per cent.
21. Neither the round hemp is produced in these provinces nor it is sold here. All persons like flat ganja which they call "kalidar." They use broken ganja when they cannot get the flat.
22. Charas is neither sold nor smoked by the people of these provinces.
23. The people of these provinces do not smoke bhang.
24. They use bhang to a very limited extent in large towns, such as Hoshangabad, Harda, Seoni and Sohagpur. They use it especially in the summer season. Mostly bhang is used by the Rajputana grocers, Brahmins, Marwaris, and the inhabitants of North-Western Provinces. The persons who have settled in these provinces long ago neither drink nor eat it. During the Holi festivals they generally eat majum made from bhang by mixing ghee and sugar with it. They also drink it, when powdered, with water. In villages they neither eat nor drink bhang. Five per cent. of the population eat and drink bhang.
25. Charas is not at all used in these provinces. Ganja is much used, and bhang to a very small extent.
26. They do not smoke charas in these provinces. The average number addicted to ganja smoking is 5 per cent. of the whole population of the district, and that of bhang, 2 per cent. The average of the persons who have become slaves to

it and consume it to a great quantity is 2 per cent. The average of the persons who seldom take it is 8 per cent. The average of the persons who use it seldom but in great quantities is 5 per cent. of the whole population of the district.

27. The persons of the Hindu community who belong to Shiva sect, such as gosains, etc., have introduced the consumption of the drug. On the festival day of Shivaratri ganja, bhang and the fruits of dhatura are offered to Shiva in worship, and generally the people in token of the remnant of offer drink bhang. The persons who smoke ganja, smoke it.

28. The average expense of the addicted moderate consumer is 3 pies a day, because in $1\frac{1}{2}$ pice ganja 4 annas in weight is available which is sufficient for two times and that of bhang 1 pice per day: one anna's worth ganja is sufficient for an addicted person who can consume much, and half an anna's worth of bhang.

As they do not smoke charas here, therefore I cannot say anything about it.

29. They do not smoke charas here. Generally they mix tobacco with it and then smoke it. They mix black pepper, sonph and coriander seed with bhang. They do not mix the seed of dhatura with it; but if they intend to trouble or injure anybody, they mix the seeds of dhatura with it in order to heighten the intoxication, whereby the smoker is put to great troubles. Bhang is also used as medicine, which is then called thandai. Grocers sell it, but it is not used in these provinces. It is sold in the cities of North-Western Provinces, where they much consume bhang. Sonph, coriander seed, black pepper, rose flowers, seeds of kakri, kashini, cardamoms are mixed with the powdered drug. They also drink it with sugar and milk.

30. All the abovementioned drugs, charas, bhang and ganja are smoked in company. They do not appear good in solitude. It is confined to males only. The average of the female consumers is nil. Charas is not smoked in the provinces. But in Oudh, and specially in Lucknow, women also smoke it. There they are known by the name of Sakin, that is, the providers of tobacco and charas. Ganja produces a very strong intoxication. The women cannot bear the puffs of its smoking, therefore they do not smoke it. But no doubt they, to a small extent, drink bhang as thandai in Holi festival. But they do not drink it always. Their boys consume these drugs—bhanga or majum—in Holi festival. All the abovementioned drugs are commenced from the beginning of the age of puberty, and when they have become slaves to them, they are obliged to continue them till their old age. Some persons leave them also. Nobody begins their use in old age because they are injurious in that age. They no doubt generally begin to use opium in the old age.

31. People become addicted to smoke charas and ganja by smoking it a few times only, because of their liking to do it. Consumers of bhang do not soon become addicted to it, because the people generally drink it as thandai in the summer season and leave it off in the winter and rainy seasons. Of all the three drugs, bhang can be left off soonest; and charas and ganja, by diminishing its use, can be left off by degrees. The persons that are addicted to smoking charas and ganja moderately desire to consume a good quantity.

32. As regards the smoking of charas, there are no social or religious customs; nor is it sold

here. But the consumption of ganja and bhang is social and religious in these provinces. In the first place, ganja and bhang are offered to Shiva in worship on the Shivaratri festival, and on that festival they take it in the way of offerings. Secondly, the Brahmin grocers use bhang, ganja and majum in the Holi festival by way of hospitality in feasts. It is simply used to divert the mind moderately. They either eat or drink bhang or majum as offerings on the Shivaratri and Holi. They do not become addicted to them by doing so. They are not injured by them. It is no doubt injurious when taken in great quantities. The consumption of ganja is restricted to those who have smoked it some time.

33. Generally, and as a rule, their consumption is considered bad, but the general opinion, both social and religious, is to use it in the way of offering, so that one may be able to divert himself by keeping his thoughts aloof for some hours from the anxieties of the world. Charas is not smoked in these provinces. The gentlemen consider consumption of ganja bad. The noblemen abstain from this. Generally it is restricted to fakirs, Gosains and other menial castes. They very seldom take bhang. They take it in the summer season and Holi festival as thandai, but they are not censured for this. They do not worship the hemp plant.

34. The fakirs and gosains no doubt, who under religious restrictions, smoke hemp to keep their minds aloof from worldly anxieties, will object to quit it. The sailors, water-carriers, palanquin bearers, who generally have to deal with water, will also object. Five per cent. of the Hindu community will raise objections.

35. Both charas and ganja are injurious for man's health. It is advisable to put a stop to their use. Bhang does not injure anybody's health; it need not be stopped. The people will, no doubt, murmur if the cultivation and sale of these drugs is stopped. But if a heavy tax is levied upon the drugs, it is presumed that in course of time it will diminish day by day. Less leniency might be shown as to the right of lawfully keeping drugs, that is to say, instead of 5 tolas of hemp, the limit may be reduced to 2 tolas, and that of bhang, instead of $\frac{1}{4}$ seer, to one chittack. The political administration will not suffer in any way by so doing. If the drugs are at once abolished, the people will incline to use other drugs, because it goes hard with them to leave the use of the drugs then and there. They, therefore, will satisfy themselves with other drugs. The mean castes will satisfy themselves with wine, and the fakirs with the seeds of dhatura and bahnag, the poisonous drugs.

36. Wine is not used instead of these drugs. Intoxication from wine is quite different from that of this drug. Secondly, the persons who are prohibited from drinking wine by their religion will prefer the use of these drugs, but those who drink wine do not at all like these drugs, but of course when compelled by their pecuniary circumstances, they prefer ganja and bhang to wine to satisfy themselves.

37. Charas does not produce strong intoxication. The intoxication brought on by hemp is strong. Therefore the consumers of charas do not at all desire to smoke ganja.

38. Round hemp is not produced in these provinces. There is a very slight difference between flat and broken ganja, because both of them are the same thing. When it is reduced to small particles

it is called broken ganja. The flat ganja is first powdered and washed with water and then smoked, therefore it makes no difference.

39. Smoking hemp is more injurious than eating it, because by smoking, the heat is increased through the fire which burns it. It is not very injurious if it be eaten as majum or drunk with water, because water, sugar, and ghee reduce the heat to a certain extent.

40. Ganja and charas have not been considered as medicine by the native physicians. Bhang is used as a medicine. It is given to the animals, and it also removes the fatigue of the journey. It is given to oxen to make them fleet of foot.

41. Charas is not at all smoked in these provinces. The advantages of ganja and bhang are described as follows :—

- (a) It increases hunger and is a digestive.
- (b) It removes fatigue and increases strength.
- (c) Its use saves a man from falling sick when the climate is not good.
- (d) A man is injured by being exposed to cold in the winter and rainy seasons. It removes all this.

The abovementioned four advantages can be had only when the drug is taken moderately, and it should only be taken when necessary, otherwise one becomes addicted by the daily use, and instead of good it produces harm.

42. Excessive use is bad, and by being addicted to it one's desire of intoxication is increased. It is not injurious when taken occasionally, because it removes fatigue if taken moderately.

43. The neighbours are not at all troubled by moderate consumers, but the persons sitting in the same compartment perceive a bad smell and abhorrence of the smell emitted by the puffs of the smoke.

44. Persons who smoke sometimes are soon intoxicated and comforted, fatigue is removed and food is soon digested. The intoxication lasts for three hours if it is smoked moderately, afterwards it produces uneasiness, which lasts till it is again smoked, and the intoxication of bhang lasts for six hours.

45. It is injurious to persons who are so addicted to it as to use it daily excessively. It diminishes a man's strength when he does not get good food with sugar and ghee. If he does not get good food, ghee and milk, it dries up his body and reduces his digestive power. When a man becomes weak and suffers want of nourishing food, it produces cough, and often turns into asthma. Generally the excessive use of hemp dries the body and makes the sense defective, and when a man does not get ganja, dullness prevails over him and blunts his memory and he becomes insane. But the dullness and insanity disappear when he gets ganja to smoke. Its visible signs are that the eyes are always red, and a roughness appears on the face. Excessive use of the drug makes one insane. The intoxication of the drug is very injurious for a person who is troubled by headache and mental anxieties.

49. The persons who consume the charas and hemp moderately, generally say that it delays the discharge of semen. The dancing girls do not use ganja. The dancing girls of Oudh smoke charas. It is not used in these provinces. The use of ganja and charas is injurious when it is used excessively. It produces much heat and

cough which afterwards turns to asthma. The excessive use of ganja makes a man impotent if he does not get good nourishing food.

50. It is injurious to smoke charas and hemp excessively. Such a person is attacked by cough and asthma and his sense is rendered defective, and afterwards, in course of time, he becomes mad.

51. Generally persons of bad character smoke ganja and charas. The noblemen abstain from it. People often commit offences in a state of intoxication.

52. Persons much addicted to the use of ganja are wrathful, and on account of intoxication their sense becomes defective, which leads them to commit offences.

53. No such case has occurred in which a person who has smoked ganja committed homicide. In fact a man dies when he is deadly intoxicated all of a sudden.

54. In certain cases no doubt mischievous persons smoke ganja in order to increase their excitement, so that they may become fearless.

55. Generally mischievous persons in order to increase their determination and strength, smoke the drug excessively. Sometimes the smoke of the drug emitted by the puffs affects the brain too much, which really makes them senseless. In other cases it is not so effective.

56. Something else is added to hemp when smoked. Generally they mix dried tobacco with it and then smoke it, that is to say, they first powder it, wash it with water and mix tobacco with it and then they smoke it. They very seldom smoke ganja mixing seeds of dhatura with it. When they intend to intoxicate anybody deadly, they mix seeds of dhatura, which makes people insane.

57. They do not smoke charas in these provinces. They generally eat majum, which is made from ganja. They boil the drug mixed with water and ghee over the fire; by so doing the ghee absorbs the intoxication of the drug. After this they throw the drug out; afterwards they mix sugar syrup and fragrant spices with it, and then harden it into cakes. Afterwards they sell it at a pice weight for a pice. When they do not get bhang from foreign provinces, they mix sugar with powdered ganja and drink it as syrup.

In this way it produces intoxication both by eating and drinking it. If it is used excessively, it dries the brain and produces headache, but is not injurious like ganja.

58. I am serving as Excise Daroga for the last twenty-nine years; I, therefore, have a thorough experience with the system of excise administration in respect to hemp drugs. The present administration of the province needs no improvement.

59. Improvements are necessary in the North-Western Provinces and Oudh. There it should be managed as it is done here. No godown is appointed there, nor any fee is fixed on ganja and bhang. Simply the wholesale vendorship is auctioned. They buy ganja from tehsil Khandwa, of the Nimar district, and bhang from Bahraich, etc., in Oudh and sell it cheaply. Bhang sells at 4 annas a seer in North-Western Provinces, and ganja at 6 pices per tola. As no fee is fixed there, it is largely consumed. The comparative statement of expenditure of the North-Western Provinces and Central Provinces will prove this very clearly.

60. The cultivation of ganja is restricted to tehsil Khandwa, of the Nimar district, where it grows abundantly. The method of its administration will be known from the Khandwa report, as I am not well acquainted with it.

61. Charas is not produced in these provinces. I am therefore incapable to write anything on it.

62. Bhang in these provinces is not made from the hemp plant. It is imported from Rajputana. I therefore cannot say how it is supervised there.

63. There is no objection to the present system of the wholesale vend, but there is objection to the retail vend :—

(a) They should be allowed to keep lawfully 2 tolas instead of 10, so that it may deter persons from bringing it from other States.

(b) Charas instead of 5 tolas should be reduced to 2 tolas.

(c) Bhang and other things made from it may be allowed 5 tolas instead of 20 tolas.

The grant is too much as is given under the Act XXII of 1881. This encourages persons to bring the drugs from foreign States. A traveller should keep with him only so much as may suffice him for two days, because there are retail vendors' shops everywhere. Two tolas of ganja is quite sufficient to a moderate consumer for four days, and it is sufficient for an excessive consumer for two days. Two tolas of charas is sufficient for eight days for a moderate consumer, while it will suffice for two days to an excessive consumer. Five tolas of bhang is quite sufficient for a moderate consumer for eight days, and for four days for an excessive consumer. Present laws do not compel a man to take a license to keep more than the fixed amount of drugs, therefore the forbidden products can very easily be brought from other States. They cannot be recognized also. When they will be allowed to keep less than they do at present, the Government will surely be benefited from it.

64. I have no objections to the existing regulations governing the export and import of these drugs, but I have to say that ganja which is exported to the North-Western Provinces and Oudh, should be correctly weighed and sealed. Otherwise a man can play mischief. Here it is kept in bamboo baskets with tât around it, and is exported in this way. This can create opportunity to commit mischief.

65. The fee that is fixed on the bhang and ganja in these provinces is reasonable, although it is small when compared with the fee of wine. They will import largely ganja and bhang when high rates of taxation are fixed, unless the amount of lawful possession of the drug is diminished—*vide* answer No. 63. Higher taxes are advisable in the North-Western Provinces and Oudh.

66. The round ganja is neither produced nor imported in these provinces. The flat and broken ganja are the same thing, they therefore do not require separate taxes.

67. The fee that is fixed on the vendors of ganja and bhang is reasonable. It will be imported unlawfully if they have to pay more dearly. Charas is not used in these provinces. The fee of bhang and ganja is reasonable.

68. Hemp is cultivated in tehsil Khandwa of the Nimar district. There is a licensed shop of ganja at Khandwa. The same shop is appointed for the safety of the cultivators' products. The full information regarding this will be known from Khandwa.

69. The people in general are not required to express their opinion when the shop is first opened. Shops are opened in large towns. It is necessary to obtain everybody's opinion on it.

70. There is harm if the drug is imported from Native States, but careful supervision is necessary. The duty is really paid in respect to the ganja and other hemp drugs used. No other drug is found here which is not taxed.

24. Evidence of BRIJMOHUN PATNAIK, *Mahanti, Treasurer, Sambalpur.*

1. I have seen people consuming the drugs and I have also enquired about it. There will be about 200 consumers of ganja and siddhi in Sambalpur.

2. Siddhi or bhang and ganja are used here. Charas is not used here. I don't know about the use of charas.

Yes.

14. Not prepared here. Only imported ganja and bhang are used.

18. Bhang or ganja if kept in a closed box for a year will lose part of its intoxicating effect. If it gets wet it will get quite spoiled. It will not keep more than 4 or 5 months if not excluded from air. It will lose all its effect in course of time. It will keep at least one year with care. It is the effect of the air which makes it deteriorate. Exclusion from the air is the main thing to preserve it. These remarks apply to both bhang and ganja.

19. Ganja is also used for the native medicine called "môdak" and for a medicine for dysentery and for cattle medicines.

20. Religious mendicants and low classes generally are specially addicted to ganja smoking. Bhang is generally used by the higher classes,

but to a very moderate extent. There are no special localities. About six men in every thousand would use ganja and four men bhang. I think on further consideration that 10 per cent. of the population is more nearly the real proportion of users of the drugs. That would make about 1,400 altogether in Sambalpur.

21. Round ganja is preferred for smoking.

23. It might be used if ganja cannot be got. Brahmins and Kurans mostly use bhang.

24. About four men in the thousand. Out of four consumers, I think one would drink it, three would eat it. There are no special localities.

25. The use is on the increase of both bhang and ganja. I think because bad characters and others like the sensation.

26. For ganja, out of ten consumers—

(a) six;

(b) one;

(c) two;

(d) one.

About the same proportions hold for bhang.

27. No particular class of users is more given to excess than others.

- (a) Some take to it for the sensation and some because it calms the mind, makes appetite and removes belly-ache.
- (b) From habitual moderates people become habitual excessives, because the taste grows on them. These cases are not, however, common.
- (c) The same reasons as (a).
- (d) Mostly the pleasure of getting intoxicated. These remarks apply to both bhang and ganja.
28. *Ganja*.—(a) 1 pice worth or 1 tola.
- (b) 3 pice or 3 tolas.
- Bhang*.—(a) $\frac{1}{2}$ pice worth or $\frac{1}{2}$ tola.
- (b) 1 pice worth or 1 tola.
29. *With ganja*.—(a) Tobacco. (b) Dhatura. Tobacco is mixed to make it more intoxicating. Dhatura makes it very much more intoxicating.
- With bhang*.—(a) Poppy seeds, cardamom, cloves, pepper and other fragrant spices are commonly mixed, in order to lessen the intoxicating power and make it pleasanter. I know no items exceptionally mixed with bhang. "Bhang masala" is a mixture of the things I have named.
30. Both drugs are consumed both publicly and in solitude. I cannot say in what proportions they are used in company and in solitude. Men only use them. From 16 to 35 years is the usual time of life. They generally stop by 35 if they find it injuring their health, but not otherwise. Children do not consume these drugs.
31. The habit for both drugs is easily acquired. It is not easily broken, especially smoking ganja. There is a tendency for both drugs for the moderate habit to become excessive.
32. There are no particular customs.
33. People think nothing of the habit of using either bhang or ganja. They do not worship the hemp plant. Ganja and bhang are offered to Mahadeo.
34. Religious mendicants cannot give it up easily, as they use hemp to aid their contemplation. There would be about 50 such in Sambalpur. Other classes could give it up after a while with some difficulty.
35. No. The drug would be consumed illicitly. The prohibition could not be enforced properly. It would cause serious discontent. They might even rebel against the Government. Consumers would not likely take to alcohol or other drugs in place of hemp. They have not the same effects.
36. No.
38. Round ganja is preferred as being more intoxicating than the other two kinds. Broken ganja is the weakest in its effect.
39. Smoking ganja is more injurious than drinking bhang. It produces cough and headache and other diseases.
40. Purified ganja is used. Bhang is not used. Ganja calms the mind and moves the bowels. Occasionally it is used for cow pox and hoof disease and other cattle diseases. I have never used it myself. I have only heard this.
41. As to ganja—
- (a), (b) and (c), yes.
- (d) I cannot say.
- Gonds and Konds use it and other aboriginal tribes. The upper classes use bhang sometimes for (a). I have heard this. I have also seen gutis and others smoking ganja when much fatigued or suffering from fever. I mean moderate

occasional use. When a man is in bodily pain he generally takes ganja to alleviate his suffering.

42. Except when a man is unwell, I think it is harmful. Because I think any form of intoxication is bad.

43. Yes.

44. It is refreshing to mind and body. It creates appetite, but in excess allays hunger. The effect lasts for at least two or three hours. There are no good effects, but a feeling of fatigue follows when the effect wears off. The want of it produces longing and restlessness. I have observed this among consumers of ganja. The effects of bhang are similar, but the want of it is not felt so much.

45. As to ganja and bhang only excessive taking is injurious.

46. Habitual excessive use of ganja impairs the constitution. It injures the digestion and causes loss of appetite. It causes dysentery, cough and asthma. It also generates rheumatism. It impairs the moral sense and induces habits of laziness and debauchery. It produces insanity, sometimes permanent, sometimes temporary. The madness is of all kinds. The symptoms may be reinduced when temporary by excess in use after recovery. There are no special kinds of types of mania. I have no knowledge to answer the rest of the question. As to bhang the bad effects are similar but less severe. I have observed cases myself. I cannot think of any particular cases.

47. It is not hereditary. The children of ganja smokers are often very weakly. They have no particular diseases. I have not observed this effect from bhang.

48. The above is the effect of habitual excessive use of ganja. No such effect on children is observed in cases of habitual moderate smokers.

49. The only form used for this purpose that I know of is "módak." This consists of ganja mixed with massalas, i.e., spices and medicines. This is not so injurious as plain ganja. It is used for an aphrodisiac, and also as a medicine for rheumatism and other diseases. There are many kinds of "módak." Prostitutes sometimes use it.

50. Excessive use of ganja only tends to produce impotence. Módak is not used much to excess.

51. No.

52. Many bad characters are excessive consumers of bhang and ganja (especially the latter). Excess tends rather to crimes, especially murder, as it makes the person affected angry. I have known one or two cases of murders while under influence of hemp.

53. Yes, to violent crime sometimes. In one case a man tried to kill a woman while under the influence of ganja. The man's name was Paltu. I do not know if he was under provocation or if he had any reason for the act. I don't know of any case when a man under the influence of hemp tried to kill or killed another for no reason.

54 and 55. I do not know.

56. See Answer 29. I do not know much about this. Excessive consumers of ganja like to put dhatura seeds in their pipes to make the ganja more intoxicating. If given to one not accustomed he might die of its effects.

57. Ganja is sometimes mixed with spices and water and used the same as bhang. When bhang is not available ganja is so used. I have no special remarks to make about it. It is stronger than bhang.

59. People would prefer home grown ganja to Khandwa. I think too many ganja shops are allowed. Two shops are enough for Sambalpur town. For the district I don't know how many are required. If there were fewer shops, I think it would lessen the number of consumers. Country ganja is more intoxicating than Khandwa; therefore, people would use less and would be better. I think country ganja is less injurious than Khandwa ganja. I am told that the latter produces headache and belly-ache, which the former does not.

62. I do not know.

63. As regards the retail vend of ganja it should be fixed that the retail amount to be sold should be 4 tolas. I think Government should manage the sale of ganja themselves. If they farm it out to several people it is a motive to the farmers to push the sale. It should only be sold to those who are known to be consumers. The

excessive consumers would have to be licensed. Other moderate consumers might purchase without a license. Shops should only be opened with the approval of the local punchayets—I mean the Local Boards and Municipalities.

65. Yes.

66. Yes. Round should be taxed most, and broken least according to strength. I cannot say what rates would suit.

67. See 59, 63. I have nothing more to suggest. Government should only realize actual charges, not profit, in order that it should be cheaper. I think it a good thing for hemp to be cheap, because people waste more money otherwise.

69. See 63.

70. I do not think there is much smuggling in the district. A little is done from Native States by jungle people.

25. Evidence of UMA CHURN MUKERJEE, Brahmin, Government Clerk, Jabalpur.

33. Social Hindus regard ganja as "a good electrical herbage giving a nice vigour in the body and sanctity in the mind." I do not think the habit of smoking it is regarded with disapprobation.

44. I am 46 to 47 years old. I have smoked ganja for about twenty years. I used to smoke half a tola in the day. Now I smoke up 2 tolas per diem. I smoke in the morning and evening. My experience is that it gives vigour to the body and mind. It also gives appetite. The effects last 10 or 15 minutes. It cures bronchitis and asthma. I have myself cured some patients with it. I think that ganja has no evil effects. I can leave it off for a time without difficulty or inconvenience.

45. I have never found ganja smoking stand in the way of my work, and I have never had to take sick leave on account of ill-health. I never heard of anybody going mad from ganja smoking, or committing violent crime in consequence of it.

49. I am not aware that ganja is used as an aphrodisiac, nor that it tends to produce impotence.

60. I do not think ganja should be abolished, nor the tax raised.

Oral evidence.

Question 44.—I do not often smoke as much as 2 tolas a day. I generally smoke one chillum in the morning and one in the evening. I can forego my pipe, if necessary, for a day. I experience the same feelings from $\frac{1}{2}$ tola ganja as I do from 2 tolas. I have met jogis and fakirs who smoke as much as 6 or 8 tolas in the day. Excess of ganja does not do the same mischief as excess in opium and liquor; but it does some harm. Excessive smoking makes the headache badly. Some 12 or 13 years ago, I experienced such headache. My constitution has now changed, and I do not feel that effect. I never exceed 2 tolas now; but I can do so if companionship requires it. I began to smoke at 15 years of age. I have intermitted the habit; but smoked regularly the last 16 years or so. I learnt the habit in companionship with theatrical youths. I am a Gond Brahmin. At first ganja intoxicated me, and then it began to refresh me. I never was rendered insensible by

ganja. When I first drank bhang, I could not hear the barking of a dog. The intoxication never caused me trouble. About 75 per cent. of the people of the Central Provinces smoke ganja. In Bengal the number of smokers is comparatively small. I have cured chronic dysentery and asthma, and some epidemic attacks with the drugs. The Bavas administer the drug also. I only mixed tobacco with the ganja. Rich people wash the drug in rose water and similar perfumes. They say fakirs and jogis mix dhatura with the drug. Many of them do so; less than $\frac{1}{4}$ th of them—perhaps 5 or 10 per cent. I have used dhatura. It is irritating. It did not make me insensible. There was irritation of the mouth, throat, and chest. I have only used it two or three times. I have smoked other vegetables, a fine leaf like grass which is very intoxicating called gorkha ganja. The weed was discovered by the Gurkhas, hence the name. The seed of shial kanta is also used. It is as intoxicating as opium. I have tried bachnag (aconite), chewing a minute piece of the root, not smoking it with ganja. (Describes a piece as big as a small pea.) It causes tingling of the tongue. The spasmodic effect is like that of nuxvomica, causing convulsive movements of the limbs. I can subsist without food for some days on ganja and betelnut mixed with a little bhang. Jogis can do more remarkable things by the same means. It is possible that some people of inferior intellect may have been driven mad by ganja. Their phrenological and physiological characters may have been abnormal. I have seen no one go mad from ganja. Ganja cures madness. Ganja excites energy. A man who has fixed his mind on murder or other crime will be diverted from his purpose by ganja. It rouses the mind, but not the body. I am a clerk on Rs. 80 in the Commissioner's office. I have been 19 years in the same post. I am a copying clerk. I have had serious illness. I was two years ago intoxicated by a dose of wine given me by friends. I was taken to the hospital and cured. I drank wine first at Calcutta. The effects of ganja following on a drink of wine was to reduce the intoxication of the wine, and replace it by a pleasing frame of mind. I have not taught my son to smoke ganja, because he is only 13 years old. I took ganja to help me to write this paper, which I have produced. Ganja helps me in my work. I am a re-

ligious man. I associate with jogis. I am myself a jogi if you like. My eye-sight has fallen off during the last two years. My mind is active. I have had no recent illness. I smoked ganja early this morning at my prayers. I was in hospital for one day on the occasion described above.

A fellow musician gave me drugged wine. As soon as I drank it, I became insensible and swooned. I do not remember how I was treated by the doctor. I waked in the morning at prayer time, and found I had upon me wounds like burns. These were cured in nineteen days.

26. Evidence of COLONEL J. C. DOVETON, Conservator of Forests, Southern Circle, Central Provinces.

1. As a Divisional Forest Officer, the Gonds and Kurkus of the wilder parts of Hoshangabad, Betul, Nimar, and Chhindwara were constantly coming under my observation. In later years, my experience has extended to the Bygas of Mandla, Balaghat, and Bilaspur, the Marias of Chanda, and the Gonds residing in the vicinity of the forests in other districts; but I have not had the same opportunity of observing their habits.

20. In the districts of Betul, Hoshangabad, Chhindwara, and Nimar, between 1864-1869, only one case of the use of hemp drugs by jungle tribes (Gonds and Kurkus) came under my observation. The individual was the head man of a village, and did not use any of the preparations in excess. Recently, referring to a body of about 30 of the men working for Government, the officer in charge observed that "there were 5 who smoked ganja."

21. Though still restricted and in moderation, the use of hemp drugs by the jungle tribes is more common than formerly.

Letter from COLONEL DOVETON, published as an Appendix to his evidence.

I regret that I myself know very little regarding the use of hemp drugs beyond that they are used to support both men and beasts under fatigue.

In all my wanderings, I have rarely come across a case of evil results that could be attributed to the use of preparations of hemp, and this has led me to infer that, though commonly used, the excessive use of such drugs is chiefly confined to towns where the inferior classes generally congregate.

With special reference to the jungle tribes referred to in the Secretary's letter, it may be said that they, and specially the Bygas of Mandla, Balaghat and Bilaspur, are fond of spirits; but it can hardly be said that these people are much addicted to the use of hemp drugs. Up to about 1870, the use of these drugs was almost unknown, to those at least in the districts of Hoshangabad, Betul, Nimar, and Chhindwara.

From 1864 to 1869, in the districts abovementioned, I was constantly out with large gangs of the people either for work or sport, and I can well remember that if by any chance a chillum was produced that was drugged with any of these

preparations—and this did sometimes happen—it disgusted the majority of the men present.

That the use of ganja by the jungle tribes is more common than formerly is certain; but it is also tolerably certain that by them it is rarely, if ever, used to excess.

It is believed that the belief in its properties for sustaining men under fatigue and exposure is the chief reason for its use by members of the jungle tribes in the present day.

In the following extract will be found the statement of Khan Sahib Mahomed Ghose, Extra Assistant Conservator, a Forest Officer who has had to spend many years of his life among the jungle tribes:—

"The jungle tribes I know of are as follows:— (1) Korkoos; (2) Gonds; (3) Baigas; (4) Kamars; and (5) Binjwars.

"Korkoos are found chiefly in Betul, Hoshangabad, and Nimar districts; Gonds are scattered over the whole Central Provinces, and form in two classes, known as Raj Gond and Pahari Gond; Baigas are of four classes, but one class does not differ much from another either in habits, customs, or the mode of living. They live chiefly in the hilly portions of Mandla and Balaghat; Kamars and Binjwars reside in forests of Chhattisgarh division.

"Raj Gonds live in populated portions, and form a part of agricultural community in almost all districts. They smoke ganja and drink bhang; but the consumers of the latter drug are less in proportion to those of the former.

"The other classes of jungle tribes are fond of liquor extracted from mohwa flowers.

"Baigas in particular are too much addicted to it, and sacrifice all they earn for obtaining the drink.

"Ganja or bhang is not much appreciated either by Baigas or by other jungle tribes. Nevertheless, some of the men of these tribes who have happened to associate frequently with the people come from the plains get into the habit of smoking ganja; but still they consume it in moderation.

"Bhang was never noticed to have been eaten or drunk by these men. It was probably due either to its elaborate preparation, or to its being more expensive than a few pinches of ganja required for smoking at a time."

27. Evidence of MR. A. E. LOWRIE, Officiating Deputy Conservator of Forests, Chanda.

1. Local enquiry and personal observation.

2. Yes, the definitions may be accepted by the names given. Ganja and bhang may be obtained in this district, but charas is not obtainable.

3. It does not grow wild in any portion of this district, and only in small quantities in certain

districts of the Central Provinces. I have seen it growing wild in the Dehra Dun district, and in the hills beyond Mussoorie, Chakrata, Simla, and Dalhousie.

4. By the names of ganja, bhang, and charas. Yes, these refer to the same plant.

5. A moist climate, rich, well-drained light soil, and rainfall of over 60 inches, and an elevation of from 2,500 to 7,000 feet above sea level are necessary for the growth of wild hemp.

6. As far as I have seen it, it is dense.

7. Only in one place in the north of the Nimar district have I seen it cultivated, where it was grown for the production of ganja, and also for the use of its fibre. It was grown in one small patch a little over an acre in extent.

10. Where seen cultivated by me, it was cultivated by the ordinary agricultural cultivator.

13. It could be largely cultivated in this district.

14. In this district, as far as I am able to ascertain, ganja, charas and bhang are obtained ready-made.

15. The preparations for smoking (A) are—ganja is taken in the hand and sifted of all small pieces of woody material; it is then rubbed in the palm of the hand, undergoing a sort of washing twice and thrice; the remnant is then taken and mixed with a quantity of tobacco according to the liking of the smoker; it is then smoked. (B) Ganja and bhang are both eaten. Ganja is eaten by the Gonds only medicinally for diarrhoea or pain in the stomach; it is mixed with a small quantity of gur and onion; then wrapped up in flour and roasted in the fire; it is then taken out and made into pills and given to the sufferer. In the case of bhang it is eaten as a sedative and narcotic mixed with sugar or gur, and by the higher classes in the district it is eaten as majum. (C) Drinking.—Ganja and bhang are both drunk as an intoxicating drink. It is mixed with either milk or water flavoured with gur or sugar. The drink is given to friends either on the occasion of a festival, marriage, or other happy occasion.

16. Where grown, bhang is prepared by people in their own houses. Yes, it can be prepared from the hemp plant wherever grown. Yes, I have seen ganja prepared from the wild plant.

18. Ganja and bhang both deteriorate on being kept. No, it does not quite lose its effect, but is liable to the attacks of a small beetle. Damp and insects are the causes of deterioration. With ordinary care it will last four years. It should be kept dry and in a well closed bag or tin.

19. Ganja is issued only for smoking. It is also used medicinally by the Gonds and Dhimals in the wild portions of the district.

20. For regular smoking ganja is not largely used by the Marias and other tribes in the isolated portions of the district, and only about 2 per cent. of the men smoke ganja. Coming farther north, and taking a line from Chanda to Mul and then on to Chamursi in the south, and from Moharli to Brahmapuri in the north, the percentage of ganja smokers increases to about 8 per cent., while north and west of the Moharli-Brahmapuri line it increases to about 10 per cent. of the male population.

21. The kind of ganja most largely used in the north of the district is flat, while the poorer classes utilise the "chur" or dust ganja largely.

23. Bhang is used for smoking only as a substitute when the supply of ganja has run short. It is only used by the Gonds and Muhammadans in the centre and south of the district, and only to a small extent.

24. The lower class of Muhammadans, the Gonds, and some of the well-to-do Hindus in the district who are prevented from taking liquor are

given to drinking bhang; it is eaten to a less extent. All round only about 2 per cent. drink and eat bhang.

25. The smoking of ganja is on the increase among the Gonds, and this is due simply to the force of example.

26. The consumers in this district are habituals. The average percentage of habitual moderate consumers is about 5½ per cent., while the percentage of habitual excessive consumers is about 1 per cent.

27. From the Gonds and lower Muhammadans. The habits of life of these men are more or less active. There is nothing very particular that leads to the smoking of ganja.

28. (a) For habitual moderate consumers about half a tola a day, costing a little over two pice, is the allowance.

(b) For habitual excessive consumers about 2 tolas a day, costing two-and-a-half annas, is the allowance.

29. Nux vomica seed powdered and dhatura seed are exceptionally mixed with ganja to increase its intoxicating powers. The following is the "bhang massala" prepared here:—Pepper, almond, cardamoms, cloves, milk, sugar, and aniseed.

30. The consumption is almost solely practised in company, and only in the case of about 5 per cent. of the smokers in solitude. It is confined to the male sex only, and from the age of 20 and upwards. No, it is not usual for children to consume any of these drugs.

31. The habit of consuming these drugs is moderately easily formed and difficult to break off. Yes, there is a tendency for the moderate habit to develop into the excessive.

32. During the *Holi* festival and Shioratri, the Hindus in Chanda, Warora, and other large villages drink bhang. Besides these, the mendicant followers of Shiva smoke ganja daily. The custom of drinking bhang during the Holi festival is a social one, that of Shioratri a religious one, when people fast in honour of Shiva. It is regarded as essential only in the Shioratri festival. It is generally temperate. It is not likely to lead to the formation of the habit, or otherwise injurious.

33. The consumer of any one of the drugs is regarded as an inferior lot by the general well-to-do Hindus and Muhammadans; whereas among the Gonds and other regular agricultural castes in the district, the consumer is not taken notice of. No, there is no public opinion in regard to the practice. The use of the narcotic is not generally in disrepute. There is no custom of worshipping the hemp plant here.

34. No, it would not be a serious privation to consumers to forego these drugs, except that it would make them take to liquor, which perhaps would be worse.

35. It would be difficult to prohibit the use of these drugs. Yes, I think the drug would be consumed illicitly. Prohibition could be enforced by very stringent measures. Yes, the prohibition would occasion serious discontent, inasmuch as the mendicants of Shiva and others of their class would raise a cry, and then the lower classes who consume liquor would at once get the fright on board that Government having stopped ganja smoking would the next thing stop their liquor. Yes, the prohibition would largely be followed by a recourse to alcoholic stimulants.

36. No, there is no reason for thinking that alcohol is being substituted for any of these drugs.

38. Round and chur are more intoxicating than flat, chur being the most intoxicating.

39. The smoking of ganja is more injurious than the eating or drinking of any preparation. The smoking affects the health, and if not supported by something nourishing in the way of food, such as cream or milk, it brings on emaciation.

40. In this district native doctors prescribe it largely for diarrhoea, pain in the stomach, piles, and impotency. It is not used for any cattle disease, but only in cases where cattle are tired after a long day's march.

41. (a) Yes, the occasional moderate use of ganja is beneficial as a digestive.

(b) Yes, the occasional moderate use of ganja or bhang is beneficial in severe exposure or exertion, or to alleviate fatigue.

(c) It is said that the moderate use of ganja is beneficial in counteracting the effects of bad water where such is drunk.

The Gonds, Kunbis, and other agriculturists in the district. With reference to (a) and (b), the moderate occasional use of the drug is referred to, and in (c) the moderate habitual use.

43. Yes, they are inoffensive to their neighbours.

44. It is refreshing. No, it does not produce intoxication. Yes, it allays hunger on a march if food cannot be obtained at once, and at the same time creates an appetite. The effects depend on the number of times the smoker has his ganja, which lasts from half an hour to three hours. The after-effects are a general laxity of the body and disinclination to do anything. Yes, a longing is produced.

45. Yes, to a slight extent it weakens the consumer. Yes, if habitually taken, even in moderate quantities, it injures the digestion. Yes, if habitually taken, it brings on bronchitis and asthma. Yes, if habitually taken, it induces laziness somewhat and habits of immorality. Yes, it deadens the intellect and produces temporary insanity. Yes, the symptoms may be reinduced by use of the drug after liberation from restraint. The symptoms are of a mild nature in the use of bhang, but more violent in the use of ganja. No, I do not think that insanity tends to indulgence in the use of hemp drugs.

47. No, the habitual moderate use of these drugs is not a hereditary habit.

48. No, the habitual excessive use of any of the drugs is not hereditary.

49. Yes, bhang is taken as an aphrodisiac. Yes, it is used by prostitutes. No, it is not more injurious than when taken as an ordinary narcotic. No, the moderate use of hemp does not tend to produce impotency.

51. In this district a large proportion of bad characters are not known to be habitual moderate consumers. I have not found any connection between the moderate use of hemp with crime in general or with crime of any sort.

53. The habitual indulgence in any of these drugs does not incite to any unpremeditated crime, though there are some known cases where, on the first start of the habit, the consumer has had a temporary homicidal frenzy.

54. No, these drugs are not used by criminals to fortify themselves to commit a premeditated act of violence or crime.

55. Yes, complete stupefaction can be induced by these drugs without admixture.

57. Not eaten or drunk here.

58. I am of opinion that the present system of excise administration in force in the province is working well.

63. No objection.

64. The regulations are good, and there is no objection.

65. The taxation of ganja and bhang is reasonable, both as regards each other and with reference to alcohol.

66. There is no necessity for different rates of taxation for different kinds of ganja.

68. There are no houses or shops in the district where these preparations are consumed on the premises.

69. As far as I am aware, the wishes of the people are not consulted or considered in any way when opening a shop for the sale of these drugs. Yes, I think local public opinion should be considered.

Oral evidence.

Question 1.—My knowledge is based on experience gained in the hills about Chakrata for two years, and some five years' acquaintance with the Chanda district, and special enquiries. I have also had servants addicted to the drugs.

Question 3.—I saw the plant growing near a village on the Nurbada, Panasa, north of Khandwa. It was growing in patches among the manure heaps, and appeared to be uncared for.

Question 7.—In this answer I referred to the growth I saw at Panasa. The people told me they used its fibre. The crop was in patches and practically wild. There was "cassia" and other weeds growing with the hemp.

Question 16.—It was in the Himalayas that I saw ganja prepared from the wild plant, not in the Central Provinces. By ganja I mean the dried leaves and flower heads.

Question 25.—My experience of the Gonds extends over five years. They admit the increased consumption of ganja. The consumption is, however, still moderate. They drink alcohol largely, and that habit is also on the increase. They always have been hard drinkers. The Marias, another wild tribe, are even harder drinkers. These tribes are far more addicted to liquor than to hemp drugs.

Question 29.—A chaprassi of mine told me about the occasional mixture of nux vomica and of dhatura with ganja. He himself used the mixture with nux vomica. He is a moderate smoker, has indulged the habit for a long time, and is perfectly strong and healthy. He is also a hard drinker. I cannot give any idea of the amount of nux vomica used in the mixture. Other people have also informed me about the mixture of dhatura. The mixture of nux vomica was also confirmed by other information. I am not aware of these poisons being mixed with bhang. The jungle people only smoke ganja. They do not drink or eat bhang as far as I know.

Question 33.—My experience is limited to ganja. I do not refer to hemp.

Question 35.—When I enquired amongst the religious mendicant class—Mr. Jacob, a Missionary, also enquired—they said that they anticipated the stoppage of hemp would only be a step towards further restrictions, and that liquor would be next attacked. I do not think that the greater cost of liquor would prevent the Gonds resorting to it if the hemp drugs were prohibited. The cost of alcoholic liquor is not as a matter of fact high in that country.

Question 38.—I have not seen round ganja in the Central Provinces. My information is derived from my informant's experience in the North-Western Provinces.

Question 39.—My opinion of comparative effects of smoking and drinking hemp drugs is derived from my enquiries, not from any personal experience.

Question 45.—My opinion is based on the effects of the drug on two servants of mine, a tent-pitcher and a sweeper. These men did not admit the admixture of nux vomica or dhatura. My observation showed they were weakened generally. The tent-pitcher, a middle-aged man, is asthmatic. He is lazy, but not immoral. He does not shew any tendency to insanity. For the rest of my answer I depended on general enquiries. The sweeper was a great ganja-smoker, but a bad lot all round. I cannot attribute his bad qualities to ganja.

Question 49.—Two Forest Rangers told me that

bhang was used as an aphrodisiac. A chaprassi gave me the same information.

Question 53.—I was told that three men, one of whom was a servant of mine, a Dher, had indulged in a bowl of bhang mixed with massala. The Dher became uproarious to the extent of threatening people's lives. The other men were simply stupefied. I had no information of the poisons (nux vomica or dhatura) being mixed with the drug. The Dher himself told me about it, and how he had been tied up. These men were not addicted to hard drinking or ganja smoking.

Question 55.—My answer is based on information, not personal observation.

Question 65.—I think the alcohol is cheapest to get drunk upon in Chanda district. I speak only of the Chanda district. Ganja is a convenient drug to use. It can be carried on the person, and is available at a distance from the liquor shop. The liquor drinker uses ganja under such circumstances. If ganja were prohibited and the people confined to alcohol, I do not think they would become more demoralized by the change of habit. I don't consider alcohol a worse intoxicant than ganja, and that is the meaning of my answer.

Question 69.—As far as I could ascertain, the wishes of the people are not consulted. I know a case in which liquor shops were objected to, and on representation the matter is under consideration. I am aware of no case in which the people's expressed wishes have been set aside.

28. Evidence of MUNSHI MAHOMED GHHOUSE, Extra Assistant Conservator of Forests, Raipur.

1. My personal knowledge regarding the matters connected with hemp drugs is but limited. What little I have recorded is based on the information obtained from persons who were more or less concerned with the cultivation, preparation, and different uses of the hemp drugs.

2. This is commonly known in these provinces as bhang only.

There is no other name for this but charas.

Ganja is a common name for flowering top of the plant, but to make it more distinct it is also called *ganje-ki-kali*. The flowering top, either flat or round, is called ganja or ganje-ki-kali, while the leaves and twigs detached from the kali are known as chur or bhurka.

The names by which each of these products are locally known are given above.

3. I know no district in which the hemp plant grows spontaneously; but I am aware that its seed germinates very freely, and the self-sown seed had on some occasions formed a spontaneous growth, which gradually disappeared for want of protection.

7. I know no district in which it is cultivated for any of the purposes referred to in this paragraph.

9. I have been informed that ganja is sown broadcast in the ground previously prepared for the purpose, and the growth is thinned by removal of male plants, as well as those not likely to form a good flowering top.

10. The cultivation of hemp, as far as I have ascertained, is not restricted to any particular class of men.

13. The cultivation of hemp is restricted, I hear, only to some particular districts. There seems

no reason why it should not grow in other districts. As far as I know, it grows luxuriantly in friable, clayey, or alluvial soil, and requires no special climatic conditions.

16. Those who are habituated to the use of bhang prepare it in their own houses, while occasional consumers prefer generally some shady places, such as old temples, orchards or gardens, where they are not likely to be disturbed by strangers during its preparation.

17. Bhang is made and used chiefly by the following classes of men:—Marwaris, Mahrattas, Brahmins, Rajputs, Muhammadaus.

There are also other low classes who prepare bhang, but their proportion is comparatively very small, and need no special mention. All athletes are generally addicted to the use of bhang, which is said to be very beneficial to those undergoing manual exercise.

19. Charas is not prepared in these provinces; but those who had the occasion of using it state that they mix it with gndakhu, and smoke it either in chillum or hukka. Similarly the ganja, after being well washed and squeezed, is mixed with dry tobacco and smoked in chillum. The extract of ganja is used in preparing sweetmeat, which is commonly sold in bazar and known as majum.

20. The smoking of ganja is not restricted to any particular class of men. There are men in almost all classes who smoke it more or less; but their proportion is difficult to be ascertained. I can, however, confidently say that 90 per cent. of religious mendicants, such as gosains, bairagis, and fakirs are accustomed to it. Ganja is the only drug used in these provinces for smoking.

21. In quality there seems no distinction between flat and round ganja; one is considered just as good as the other, and the people smoking ganja give it a preference to chur or bhurka.

22. As far as I know, charas is not manufactured in these provinces. If it is used at all, it is imported from other countries.

23. Bhang is never used for smoking by any class of men.

24. The people of this district eat bhang in exceptional cases, but drink it generally, as explained under 17.

25. In my opinion the use of the ganja and bhang is on the increase, because they are less expensive than any other stimulating articles, such as opium, madak, or liquor.

27. Bhang and ganja are the only drugs to be had in these provinces. The former is used mainly by people well-to-do, while the latter is generally taken by poor classes. In both cases the beginning is made under impression of the uses of drugs being conducive to health, and it is this that mainly leads to habitual or occasional practice.

29. The ganja is used ordinarily with tobacco, and exceptionally with tobacco and some additional ingredients, such as dhatura, arsenic, or the root of a poisonous plant known as *bachnaug*. These preparations are only used for smoking, and the last three admixtures are intended for production of stronger effect than that of ganja itself. The charas for smoking is mixed ordinarily with *gulakhu* and rarely with plain tobacco. Bhang is prepared in two ways. The ordinary preparation is called *siddhi*, while especially one is commonly known as *sabzi*. *Siddhi* is prepared only with aniseed and pepper, while *sabzi* requires the following massala sold for the purpose:—(1) dry seed of cucumber; (2) aniseed; (3) rose flower; (4) dry ginger; (5) cardamom; (6) poppy-seed; (7) pepper; (8) kasni seed; (9) cocoanut.

Both *siddhi* and *sabzi* are made in water; but the latter is mixed ordinarily with sugar, or exceptionally with sugar and milk together.

30. Bhang and ganja are consumed much less in company than in solitude, because the habitual consumers prefer, for the sake of economy, the use of the drug in both cases at their own houses. There are rare instances in which the consumption of the above drugs is practised by females or children.

31. Yes, a few days' practice makes one habituated to the uses of the drugs. No, it is not so

difficult to give up the habit of using the drugs as it is in the case of opium or madak. In reference to bhang, there is no tendency for the moderate habit to develop into the excessive one; but as regards ganja, there are probably 15 per cent. of the cases in which moderate smokers turn into habitual excessive consumers.

32. Bhang and ganja are both used abundantly by Hindus in eating, drinking, and smoking during their *Holi* festivals, and are regarded by them as drugs most appreciated by Mahadeo (their god). Bhang is also given in form of sherbet or majum to Muhammadan boys while they undergo circumcision. This is done simply to alleviate the suffering from the pain of the operation. The uses of the drugs on the occasions mentioned above do not tend to the formation of any habit.

33. The consumption of the drugs is generally detested both by Hindus and Muhammadans. The former dislike the practice because it leads to some vices, such as dissipation, debauchery, dishonesty, robbery, and also results in some instances in insanity; while the latter object to it chiefly in consequence of its being prohibited by Muhammadan law. Those who use the drugs are often irregular in the mode of their living, and bear generally some impeachable character.

I know no sect by which the hemp plant is worshipped.

34. Yes, it would be a very serious privation to all habitual consumers, because they shall have no other narcotic articles to substitute for those now in use at a comparatively low cost.

40. Bhang is prescribed by native doctors as possessing stimulating properties. It is used in medicines, and is also given to cattle, together with salt, as a preventive treatment of purging, to which they are generally subjected by feeding on the young shoots of grass sprouting during the early part of the monsoon.

41. It is a common belief that ganja and bhang are beneficial in their effects. The former is said to be preventive of diseases in malarious and unhealthy places, and the latter is supposed to have the properties mentioned under (a) and (b) of the question.

I refer to the moderate habitual use of the drugs.

43. Yes, they are, if they are not by nature quarrelsome; but generally they are easily provoked and become offensive.

29. Evidence of COLONEL H. HUGHES HALLET, Officiating Inspector-General of Police and Prisons, Central Provinces.

1. No special opportunities beyond general observation during a residence of thirty-five years.

2. I have no knowledge how the different preparations of ganja are made. I only know of it in the form described as "broken ganja."

12. In almost every village, I believe, one or two plants of ganja will be found in many of the "baris" or enclosures at the back of houses, growing with one or two plants of tobacco, Indian-corn, vegetables, etc.

16. I believe so.

17. No special class that I am aware of.

19. Broken ganja is, I believe, chewed and sometimes mixed with tobacco.

20. I am not aware that the use of ganja and charas is confined to any particular class.

23. Yes.

25. The use of ganja is, I think, extending, as evidenced by increased sales. This increase is not due to villagers, who frequently cultivate their own, but to townspeople. At certain seasons its use is undoubtedly, I think, extending. Lately when Officiating Deputy Commissioner at Damoh, when holding excise sales, I was struck with the large area to each liquor shop, which I thought must prevent a great many people who wanted liquor from getting it. On tour in the district I made enquiries. Harvesting had just commenced, and I was told that as the people could not leave

the fields, they generally carried a small quantity of ganja to freshen them after a hard day's work; that it was cheaper than liquor, and easy to carry about, as a small packet in a man's waist cloth would last a long time.

26. See above.

27. See 25.

28. The cost depends on the source of supply.

29. I am told dhatura is occasionally used to add to the exciting qualities of the drug, but have no positive knowledge. In the days of palki-travelling, dooly-bearers used to mix ganja in small quantities with tobacco to chew as they went along to lessen the sensation of fatigue.

30. Moderate consumers make no secret of its use that I am aware of. I have seen small paper packets of broken ganja carried in the folds of a *puggri*.

31. Yes, easily formed; and, once formed, very difficult to break from; but the tendency to develop into the excessive depends on the individual.

33. The use of the drug is *generally* accepted as a sign of dissolute habits.

34. I am not prepared to use the word serious; not such a serious privation as in the case of opium. An opium-eater on admission to jail has to be carefully watched as to his health, and it is often necessary for a short time to treat him with stimulants. After this he recovers the privation and rapidly increases in weight. No notice is taken of a man who is a ganja eater or smoker when known to be such.

35. Not feasible to prohibit; would be consumed illicitly. The prohibition could not be enforced, and would cause discontent.

36. On the contrary—see 25.

41. Yes—see 29.

42. The danger would be in the tendency to go from moderate to habitual use.

43. I should answer in the affirmative.

44. Stimulating and refreshing: if taken in excess, intoxicating.

45. I have always understood it to induce laziness and debauchery.

51. Yes. Nearly all bad characters are consumers to a greater or less degree. The dissolute habits engendered by its use leads to crime against property.

53. Yes, I think so. Running "amok" is, I should say, always the result of excessive indulgence.

57. Broken ganja is, I believe, chewed.

58. Yes. I do not know that it can be improved. The increased sales point to its being a check on illicit cultivation for sale.

69. If objections were lodged, they would receive due consideration.

Oral evidence.

Question 12.—I remember an inquiry being made by me in camp in Chhindwara many years ago when I was assistant there. I found then many cases of the private cultivation of ganja there. I have heard in conversation with Police officers that this cultivation is common, and that the police usually pass it over, though there is a reward. I mean they do not hunt out such cases in *baris*. Of course in case of private enmity

they report. My experience is mainly confined to Chhindwara; but, from enquiries made, I believe it to be fairly general. By ganja, I mean the hemp plant generally. It is only consumers who thus grow it; not as an article of commerce. If the police reported such cases, the reports would go to the magistrate, not to me. The enquiry I refer to was made in Chhindwara twenty years ago. I do not remember when the restriction of ganja was ordered, as I was on other than revenue work. The enquiries I have recently made were from natives generally on my recent tour. I cannot say in what district. It was probably in Hoshangabad, because I wrote my answers there.

Question 17.—I have only recently taken up the post of Inspector-General. In a recent case of departmental enquiry into an assault by a constable on his head constable, the defence was that he smoked ganja three times a day, at a cost of 4½ pies. This is the only case I know. I have no knowledge of how far ganja is used by the police, or how far it interferes with their work or their official character. I should say that a man would not let it be known that he was a consumer.

Question 19.—I have known that men (*e.g.*, jail officials, men in regiments, &c.) on duty carry ganja in their *puggris*, or even note books, and I conclude that it is intended to chew it on duty. I have also seen dooly-bearers chew it with tobacco. I know that ganja is also smoked; but I do not know how it is prepared for this. Chewing is not the usual form; but the ganja is chewed when it is desired to consume it surreptitiously.

Question 25.—The cultivation by villagers I allude to is in *baris* and carried on furtively. I believe that this cultivation is on a small scale to get ganja for harvest times, when the labourer cannot get his liquor easily. I think that the number of regular ganja smokers in villages is few; and I think that where a villager has a *bari* he furtively cultivates his own ganja. I base these remarks on my experience in all districts in which I have served, on information I received. I have not seen it in any district except Chhindwara, for I have not been much in camp. My Chhindwara experience was of twenty years ago. *Baris* are all private property; and unless one went in he would not see the plant.

Question 35.—I think that the prohibition of the use of the drugs would not be feasible, because the plant could be cultivated so easily with little fear of detection. Smuggling, of course, would also have to be faced as a difficulty, especially in such places as Saugor and Damoh. The present system has, of course, checked private cultivation, because there is a punishment attached to cultivation, and certain people have an interest in exposing it.

Question 51.—In jails a large number of casuals might not be found to be consumers; but I think that if you got at the truth you would find fifty per cent. of the habituals to be consumers. I should say that over a whole jail, like the Jabalpur jail, the average would be over twenty-five per cent. I think that all habituals, as now defined, are not bad characters properly so called. Therefore I conclude that more than fifty per cent. of bad characters are consumers. The excessive consumer is a dissolute person who will not work. Therefore he has a tendency to commit offences against property when he runs out of cash. This does not refer to the moderate use. I cannot refer to cases; but I fancy every magistrate has had such cases.

Question 53.—When a man is smarting under the sense of wrong, he takes to his ganja or bhang and uses it to excess. Under the influence of the drug thus used to excess and smarting under the sense of wrong, he runs "amok." I have never had experience of such a case. I only state what I have heard. But I have seen cases of insubordination and unusual violence of behaviour, due to the sense of discipline being lost by indulgence at the time in these drugs. I do not know of any

admixture of other drugs being used in the bhang in such cases of running "amok" as I have described. The man who was thus smarting under the sense of wrong would smoke or drink according to his habit. The usual statement is that the man has used bhang before running "amok." But the violence and insubordination of behaviour which has come to my notice have been, I think, due to ganja or bhang, I cannot say which.

30. Evidence of MR. F. A. NAYLOR, District Superintendent of Police, Saugor.

51. In towns especially, I think a large proportion of the bad characters are moderate consumers of hemp drugs. In the districts the proportion of moderate consumers is smaller than in towns. These drugs are generally made use of by gamblers. Whether the drugs lead to the gambling or the gambling to the drugs, I am not prepared to say, but that there is a connection between drugs and the criminals, through the channel of gambling, there is no doubt; when the gambler is short of funds, he takes to stealing.

52. The excessive use of these drugs sometimes leads to the commission of crime of a more serious nature. I know of several instances which have occurred from time to time during my service of 26 years, but having no notes, I am unable to give details. I particularly remember an instance of a Banjara in Balaghat who killed two or three persons after smoking ganja to excess. Similarly, I remember an instance of a Gond who killed his brother in the Chanda district. Another Gond who was given to the excessive use of ganja, ran amok in the Bilaspur district. I know of many instances, but cannot recall the details now.

53. An excessive use of hemp products, especially ganja, often leads to unpremeditated violent crime; instances quoted above. It also causes the death of the consumers, who, when the system is saturated to a certain extent, sometimes drop dead after taking a long pull. In my experience, at least four or five such cases have occurred. I am unable to give the names of the parties or the districts in which these cases occurred, as I am talking of an experience of twenty-six years. I however remember the cases well. I know of several instances in which it has led to temporary homicidal frenzy. Many persons in this state have in my experience been arrested and locked up, or sent to the lunatic asylum, before they were able to do much harm.

54. Yes, often. It is notorious that Ghazis "bhang" themselves when they wish to fight or to run amok. I know of several instances in which criminals have taken bhang, ganja, or liquor but never an instance of opium.

55. Yes. Criminals induce their victims to take bhang or smoke ganja, so that they may be so stupefied as to be unable to understand the nature of the crime to be committed, or to make any resistance. Complete stupefaction is not often induced by these drugs without admixture, but the drugs are used as a medium.

I can remember instances in Hoshangabad, Betul, and Khandwa in which a mixture of bhang and dhatura was administered to victims who were robbed. One or two cases occurred on the railway, and some were committed by a famous poisoner. I have on more than one occasion recovered ganja, bhang, and dhatura seed, more or less mixed, from the possession of suspected poisoners.

Oral evidence.

Question 1.—I am in Central Provinces Police. I have twenty-six years' service in this province as Assistant and District Superintendent of Police. I have been in all divisions, and in nearly all districts.

Question 52.—The Balaghat case was about eighteen years ago. As far as I remember, the criminal was a Banjara. He killed his own wife and two members of the tando. It was not a case of jealousy; but I cannot say whether there was any cause of quarrel picked. I investigated the case as District Superintendent of Police. I remember ganja was alleged as the cause. My recollection is that he was convicted; but I cannot be certain. It was above the Ghats. The man was probably also a liquor drinker; for most Banjaras drink. He ran "amok" with an axe. He had not, I think, been in that state before. He was placed under observation; and my recollection is that he was held responsible for his act. But the people of his tando alleged the excessive use of ganja as the cause of his outbreak. Many Banjaras (especially of the higher castes that do not drink) take ganja. I cannot say whether there had been any admixture in the ganja. Banjaras are a people rather given to violence.

The Chanda case was about fifteen years ago. It was in the family of a petty zamindar near Panabaras. The man killed his brother or cousin. I think it was in respect to a succession in which he would be benefited. I think the man was convicted. He was placed under observation before trial. His friends (I think) alleged ganja in excess as the cause. But my recollection is that he was tried and convicted. Most Gonds drink. Some take ganja. This man was perhaps a liquor drinker; but he was a Raj-Gond, who profess at least not to drink. Gonds are often addicted to crimes of violence. The Gond is the man who is generally employed to commit a crime of violence; and Gonds readily confess such crimes.

The Bilaspur case was a recent case, in 1890 or 1891. The Gond ran "amok." He tried to kill his wife and son, but they escaped as he was getting the weapon, and he rushed out of the house and killed the first two people he met with the sword. He had asked for food. His wife proceeded to serve it. He came in an excited state and proceeded to get his sword. Suspecting that he was off his head, the wife and son ran off. Two people (a man and woman) who were going to see what was the matter were cut down by him. He had, I think, been in a similar state once or twice before. This occurred in a village near the outpost of Kanteli. He was arrested by the Mungeli Police, sword in hand, next day. I believe he was sent to the Nagpur Lunatic

Asylum by the Magistrate. I cannot be certain whether there was any family history in this case. He had gone off his head several times before, but had done no act of violence. He was regarded as dangerous in this state. His friends ascribed this to ganja, and (I think) said that he took no liquor; but he may have taken liquor.

My Assistant, Rai Bahadur Dinanath, tells me that the case he mentions in his answer No. 52 (which is similar to my Bilaspur case) was a Chanda case, which occurred about four years ago when he was there.

Question 53.—I know of some cases in which a man died suddenly while taking ganja. I remember three cases. I did not see any of them; but the cases have been reported to me. There was an inquest in each case; but I know that none of them was sent for *post mortem*. It was said in each case that the man was a habitual excessive smoker. One dropped into the fire he was sitting by. I remember one case at least of a report of a man dropping dead after a deep inhalation while smoking tobacco. There was no *post mortem*. I have had several cases of death from spirit drinking, principally from exposure, lying out in the cold night, and also from excessive drink. So far as I remember, the three ganja cases were not men physically weak or in want. One of them was a dooly-bearer. This class uses ganja largely. The people thought that it was "the very long pull" that killed. I remember that this was specially said by the people in one or two of the cases. It was the long pull before passing the chillum to another member of the party. I think there was no rush of blood from the mouth in any of these cases; it was not mentioned.

I cannot recall any special case of homicidal frenzy arising from the excessive use of ganja. But I have heard of fifteen or twenty, or probably double that number of cases of persons arrested in a violent condition and prevented from doing harm by detention in asylums, etc. These cases were attributed to ganja. It may have been bhang; but this is little used here. Ganja is generally taken as ganja (smoked) or majum. I refer to the cases sent up to asylums in which men are described as insane; their insanity is attributed to ganja, and they are described as "dangerous to the public."

Sometimes they have been found with weapons in their hands. I cannot, speaking generally, refer such cases to any particular class; but they are principally among the low class of Hindus. In a few instances I verified the reports. I have often asked whether there was any admixture; and sometimes the friends have acknowledged that the man was addicted to two or three different drugs. When such cases come up before me, I send them on to the Magistrate with complete report. If I have opportunity at the time I make inquiry locally. I am, however, generally bound to be content with examining the people who come up with the man. I enquire whether he used other drugs. I also sometimes ask about whether he has been previously insane or any other member of his family. I do not conduct other special enquiry. If excessive use of ganja is proved, I consider that a satisfactory explanation of his insanity. If the man is under the observation of the Civil Surgeon, he often asks me about points in the case. I then make enquiry if I am in camp near the place and send in the results. This would depend on whether the original report was full enough in details. If a man goes on to the asylum, no such further inquiry is made. I

do not fill up the special form. I merely report in my own language. The question of taking ganja and that regarding family history of insanity have been referred back to me when I have not given that information. I therefore generally do give that information. I would not think of asking about epilepsy, syphilis, or injury to the head, not being a medical man. I would not thus go into the history of the case. Nor do I go into the question of malarial fever.

Question 54.—I think that ganja or bhang taken to give Dutch courage is not mixed. I have known such instances. It is taken precisely as a liquor drinker takes liquor. Men not infrequently take whatever intoxicant they use to fortify themselves for any serious undertaking such as a difficult burglary or an agrarian riot. By the words "wishing to run amok," I mean that the man has made up his mind to commit a specific murder or crime of violence. The intoxicant is taken that a man may not turn back from his purpose. I think that liquor is more often used than any other intoxicant. I cannot recall any special instance at present of such use of hemp drugs or other intoxicants. But the cases are constantly coming up.

Question 55.—The Khurai (Sangor) case mentioned by my Assistant, Rai Bahadur Dinanath, in answering question 55 is not known to me. It occurred either in 1891 or 1892. I think that the Rai Bahadur is right in saying that the hemp drugs alone will not "affect the brain," if he means that they will not stupefy without admixture.

Question 45.—The excessive use of ganja is, I think, injurious to the brain. The moderate smokers are far in the majority. I should say five or ten per cent. of consumers are excessive consumers. Perhaps between thirty or forty per cent. of adult males use hemp drugs. I think that about three per cent. of the adult male population are excessive consumers. By excessive use I mean the use which affects the mind, *i.e.*, where the consumer takes more than is good for him, as we speak of an excessive drinker. I do not think the moderate use of ganja is more harmful than the moderate use of tobacco or liquor. I think, however, that more men lose their reason from ganja than from liquor. In fact, the first question I ask about a lunatic is whether he takes ganja. I was in Bilaspur three years as District Superintendent of Police. I had six hundred men under me. One man was dismissed for excessive ganja smoking during that period. He went off his head and became violent for a fortnight at a time two or three times. He was a Brahman and a wrestler, a very powerful man. The dismissal was reported, and the cause was probably also reported, to the Inspector-General.

There was a case in which my predecessor at Sangor, on 25th June 1890, reported a constable as having become insane, and had his name struck off as he had escaped from hospital and gone off to Rai Bareilly. I produce the report in which my predecessor attributes the insanity to ganja. There have been two other dismissals within the last three or four years, which, I am informed by the Inspector, were due to insanity attributed to ganja. One of the men is still at Sangor in a semi-insane state. The Sangor police are one thousand in number. My experience is that about one such case occurs in two years in such a district as Sangor.

We have many cases of insubordination from ganja. I think ganja is a more frequent cause of dismissal and punishment than liquor. The effects of excessive use of ganja are longer in duration than those of liquor. A man who is off his head from drink is generally all right next day. With ganja it sometimes takes a fortnight. This refers to excessive indulgence. Saugor is a particularly bad district for ganja, being on the borders of Native States. Many of the police are up-country men, Purbeas, etc.; but I do not think that more of them use hemp drugs than

local men. In fact, I think low caste local men are more given to these drugs. I should think that the consumers of liquor in the Saugor police are about equal in number to the hemp drug consumers.

Question 12.—About six or eight cases are annually reported of the ganja or hemp plant being grown in *baris*. The excuse is that the seed is dropped by accident. I think it is generally by accident. I think the illicit cultivation has now almost ceased. It used to be more some years ago.

31. Evidence of SARDAR BAHADUR RUTTAN SINGH, *Sikh, District Superintendent of Police, Sambalpur.*

51. No. The habit of the drug first commenced by those given to debauchery owing to being in bad company and the second are those who have fallen in and are friendly with fakirs: the latter seldom or never commit any crime, but in the former only those who are driven to beggary do commit petty thefts for the sake of the price of the drug. It is only those of the low castes that do so. Therefore the increase of crime is not owing to the use of the drug. It is generally put down to those who are addicted to the use of the drug, as one would most readily believe that it is their doing.

52. The consumption of these drugs does not increase violent or petty crime, in fact the men addicted to it are really fit for nothing, as they could hardly do any work, and as mentioned in 51, it is only the very low castes that would do so and that seldom.

53. No, seldom. But should any one exceed

the amount usually taken, he in a way loses his senses, and in a quarrel he would strike a man with anything he might at the time have in his hand; (in that state his action would come under section 95, P. Code) but this is seldom even done.

54. No. In fact, criminals do not indulge in drugs, but they would administer the same to their victims and rob them.

55. Yes, they do; but they cannot stupefy them alone with the drug; they always admix dhatura seeds. The way this is done;—they first mix ganja and dhatura, this they half fill a chillum, and have it at hand; when they find a victim they bring out this chillum, and in his presence fill it with tobacco; he first smokes and at once knows when the tobacco is burnt; he then makes it over to his victim; on smoking he smokes the ganja and dhatura and gets quite stupefied over it.

32. Evidence of RAI BAHADUR PANDIT DINA NATH, *Assistant District Superintendent of Police, Saugor.*

51. A large proportion of bad characters, habitual, are moderate consumers of ganja: such persons commit petty thefts and simple hurt cases. The rule holds equally in the case of opium smoking and liquor imbibing. I was under the impression that I must confine my reply to ganja smoking alone. The connection in my opinion between ganja and crime is that of cause and effect. Habitual bad characters are generally idle men who do no work or can get no work, and as they have contracted the habit of smoking ganja and opium and drinking liquor, they do not feel up to work, but as they must more or less have these drugs, they are necessitated to commit petty thefts. I can instance a case in which a man who was addicted to the consumption of these drugs was caught red-handed removing a lota. On search several articles were traced to ganja and opium shops that he had pawned for a few pills of opium and ganja. He admitted the thefts and pointed out the complainants, and said he was fond of smoking ganja and opium, and as he could indulge in them just by stealing petty articles, he had taken to committing petty thefts. Though he had been several times convicted, yet the temptation was too much. Twelve petty thefts were brought to light against him.

52. The use of the intoxicating drugs obtained from hemp to excess tends to make the consumers more violent, and violent crimes are often committed by such men. In this connection, namely, that ganja causes crimes of violence, I can cite a

case in which a Gond malguzar, who was habituated to excessive ganja smoking imagined under the effects of the drug, that his wife was not going to give him food. This thought worked so strongly in his imagination that he suddenly picked up a "pharsi" and rushed upon his wife: she, however, evaded him. He then ran out into the street and "ran amok," killing a woman and a mau whom he had never seen before, believing that the former was his wife and the latter had set her on not to give him food.

53. Yes, such tribes as "Gond," "Maria" and "Punka," etc., often commit unpremeditated crimes, under the influence of excessive indulgence of these drugs: such tribes are found in Chanda and Bastar. In one case in Chanda to my knowledge, a Gond who was excessively addicted to the indulgence of these drugs asked his wife for some water, and on her telling him to help himself to it, in a sudden fit of homicidal frenzy, murdered her with an axe and then admitted that he had done the deed under the effect of ganja.

54. Yes, criminals make use of such drugs and to give them false courage when they wish to commit violent crime. In this connection, I have had cases in which Banjaras, when going to commit dacoity, highway robbery, have previously smoked ganja or drunk liquor, to give them courage to commit these offences.

55. Often criminals, in order to further their designs, induce their victims to partake of these drugs. But mere ganja will not affect the brain,

unless it is mixed with dhatura seeds or charas. As for instance, in Khurai, zilla Saugor, a large weekly cattle market is held. One Ganpat Goojer of Piperia-chore, pargana Rahatgarh, contracted friendship with three men who had come with cattle for sale to the market. After that, the accused mixed dhatura seeds with ganja and induced the three men to partake of it. When they

were found intoxicated, Ganpat Goojer bolted away with cattle and valuables of these three men. He was arrested in February 1879, and in the cases tried by Colonel Ward, then the Deputy Commissioner of Saugor, the accused was found guilty, and was sentenced to 16 years' imprisonment.

33. Evidence* of SAYAD MOHOMED TAKI, Inspector of Police, Hoshangabad.

51. Amongst the habitual moderate consumers of these drugs, bad characters are in excess. Most criminals belong to the menial castes, and amongst them the consuming of these drugs is a custom, there being no caste prejudices against the taking thereof. Criminals are severally addicted to liquor, ganja, opium and bhang. Amongst the following criminal tribes, viz.:—Pasi, Rehria, Badak, Bouria or Mogia, Mina, Nat, Banjara, Kanjar, Sansi, Behria, Bansaria, Kola Bhuti, Rajputs, Kikaria, other bad characters and menial castes, it is quite a custom to indulge in these drugs. The criminal population of Malwa and Rajputana are addicted to both liquor and opium. The inhabitants of the North-Western and Central Provinces are generally addicted to liquor; and those persons who go about in the guise of bairagis and fakirs become habitual consumers of ganja and bhang from constant intercourse with fakirs. In short, I have seen no criminal who is not addicted to some kind of drug taking, or in whose caste or tribe the taking of these drugs is prohibited. Now, it remains to be seen whether criminals take to these drugs for the commission of crime, or whether these habits are contracted because they are of certain castes.

As far as I know, these people do not take drugs for the purpose of committing crime or of becoming criminals; but they take to it at an early age from the example set them by their parents, or from custom and fellowship. The commencement of the taking of these drugs has no connection with crime whatever; but when from constant use persons become habitual consumers and cannot do without drugs, etc., and the means to procure them are no longer at hand, then to satisfy their cravings they become habitual criminals; but it does not necessarily follow that they become criminals from the beginning of their addiction to these drugs.

52. In the present time I have observed that criminals are greatly addicted, as a general rule, to liquor and opium and to a lesser extent to ganja and bhang. The criminal classes of Malwa and Rajputana go in largely for opium and liquor, and the latter is largely consumed by the criminals of the North-Western Provinces. Those persons who move about in the guise of bairagis and fakirs are much addicted to ganja and bhang, and they acquire this habit from constant intercourse with bairagis and fakirs in their peregrinations. Some habitual criminals, with the intention of passing themselves off as bairagis and fakirs, use these drugs, so that they may be looked upon as bairagis and fakirs and not as criminals. The taking of these drugs does not render any assistance in the commission of crime.

53. In my experience, extending over a period of 30 years' service, I know of three cases in which the commission of crime without any premeditation whatever was due to the indulgence in intoxicating drugs. One case occurred at Handia 20 years or so ago. Guppu Singh and other constables drank bhang, and while under the in-

fluence of bhang, Guppu Singh constable wounded one of his comrades with a sword. The wounded man narrowly escaped death. Guppu Singh was sentenced to 7 years' imprisonment for attempting murder.

The second case is one in which Mangal Singh, constable of the Harda town police, was killed by Mr. Clarke by a blow with a stick while the latter was under the influence of liquor. Mr. Clarke was sent to Calcutta. This occurred twenty-nine years ago.

The third case is that of a Nat, whose name I do not remember; and the occurrence took place in the Matkuli ilaka. The Nat, after smoking ganja, suddenly attacked his wife and killed her. He subsequently became a lunatic and was sent to Jabalpur. This took place about 25 years ago.

Besides the above cases, in my investigations no other cases have occurred in which premeditation to some extent did not exist.

54. Habitual criminals do certainly take liquor, opium and intoxicating drugs just before the commission of a crime, but this is simply to remove fatigue and not that it makes the commission of the crime any easier or emboldens them. They know that the moderate use of liquor or opium prevents fatigue. When habitual criminals are about to commit a crime, they take liquor or opium in very small quantities, in order that they may not be rendered unfit by fatigue when they arrive at the scene of their operations, and thus lay their lives open to danger. I ascertained the above during my investigation into the dacoity cases which occurred in the villages of Rehria and Bhunnas. The dacoits were Moghias by caste.

55. Habitual criminals cannot induce their victims to partake of opium and ganja with a view to committing crime. These drugs cannot be administered to persons who are not addicted to them. Now, as regards those persons addicted to them, opium has its set rules. The person accustomed to a certain quantity cannot take or be induced to take a larger quantity. Opium cannot be administered to a person in food or drink. It has such a peculiar smell and taste that the person to whom it is given will at once be able to detect its presence. Unless a man takes it to commit suicide no one else can administer it to him. There is complete stupefaction in ganja, but its effects lasts only for ten minutes.

The eating of ganja will not cause unconsciousness. In short, a criminal cannot gain his ends by the administration of either of these drugs.

The bhang drinker can become unconscious and the administrator can cause unconsciousness by giving bhang in large quantities. The stupefaction can be induced by this drug without admixture, and it takes a long time for the effects to wear off. The same applies to the excessive use of liquor, and criminals go in largely for using bhang and liquor as the unconsciousness caused by their administration lasts a long time, which gives them every opportunity for the commission of crime.

* Translation.

34. *Evidence of MR. PASLEY,* Inspector of Police and Superintendent of City Police, Jabalpur.*

51. I do not think that more than 20 per cent. of the bad characters are moderate smokers of these drugs in this city. These ganja smokers commit petty thefts only.

52. About 10 per cent. of the bad characters of this city are excessive ganja smokers; they are not addicted to any special class of crime, but commit petty thefts like the others when driven to it for want of funds to obtain the drug.

53. The excessive use of this drug incites bad characters to quarrel with people and ultimately to fight. Bairagis and sadhus are much addicted to the use of the drug, and I have known an instance in which one sadhu, when excited under

the excessive indulgence of ganja, killed a fellow sadhu.

54. I do not think these drugs are used by criminals to fortify themselves to commit a premeditated act of violence or other crime, but in almost 90 cases out of 100 criminals indulge in liquor for the above purpose.

55. I have not heard of instances in which criminals resort to these drugs to stupefy their victims. The common article used is dhatura seed; complete stupefaction can be induced by this drug. I have known cases in which persons have put ganja into a "chillam" and induced a friend to smoke it (in joke), making him believe it was tobacco, and the result was serious.

35. *Evidence of BRIGADE-SURGEON-LIEUTENANT-COLONEL J. B. GAFFNEY, Civil Surgeon, Jabalpur.*

1. I have been twenty-five years a Civil Surgeon in the Central Provinces, and have held charge of the Jabalpur Lunatic Asylum for the last seven months.

I regret I am unable to give any information or offer opinions of any value.

Lunatic asylums afford much information, but I have been but a short time in charge of a lunatic asylum.

2. I consider the definitions correct for the Central Provinces. I know of no local names.

19. I know ganja to be smoked. I know nothing of the use of other forms of consumption of the drug.

23. I have no knowledge.

28. I know not.

36. I cannot offer an opinion.

37. No knowledge.

39. I have only known of ganja being smoked and know nothing of the consumption of other forms of the drug. I don't consider moderate smoking prejudicial, and have from an early period of my service understood that a large percentage of lunatics confined in asylums was caused by the excessive use of ganja.

40. I am not aware of any of the preparations of hemp being so used.

41. I consider the moderate smoking of ganja may be useful to assuage the pangs of hunger, and that it also gives staying-power under severe exertion. I have never heard it spoken of as a preventative of disease.

42. I consider a moderate use of ganja to be beneficial when a stimulant is necessary, or when the sedative effects are desirable in pain, either mental or bodily.

44. I consider the immediate effect of moderate smoking of ganja is refreshing and stimulating. I have seen the driver of my bullock tonga have a few whiffs of ganja when opportunity occurred on long fatiguing journeys. It did him more good than harm.

45. (a) I think not.

(b) to (e) Not that I am aware of.

(f) I don't think moderate smoking produces any of these ill-effects. Were it so, the effects of the large amounts sold by contractors would manifest themselves more fully amongst the people. Inordinate smoking may produce insanity, I have no doubt, and I have seen cases attributed to the abuse of the drug. But I am of opinion that it is not the habitual steady consumer who is likely to become insane; it is the young man beginning, or the older consumer who in times of excitement, like festivals, indulges to excess, that has his reason upset; and these cases partake of the nature of acute mania from which recovery takes place in a short time. The older and heavier consumer may sink into incurable lunacy.

46. I have no information.

47. I am not aware of any evidence of heredity in the ganja habit.

48. I have no knowledge.

49. I am unable to offer an opinion on these points.

50. No information.

56. I know of no admixtures being used.

57. I have no knowledge of any form of ganja being eaten or drunk, except the pharmacopœial preparations used by medical men.

Oral evidence.

Question 1.—While I was in hospital practice at home, I had a subsidiary lunatic asylum, and thus had lunatics to treat. I also visited occasionally the Richmond Lunatic Asylum hard by with the principal Doctor. I was also for three years in a work-house near Dublin where we had lunatics. Apart from my seven months in the Jabalpur Asylum, I have had experience of lunatics in jails and as Civil Surgeon in several districts.

Question 39.—So long as twenty-seven years ago Dr. Wise, Superintendent of the Asylum at Dacca, told me he thought a third of the lunatics in the asylum owed their insanity to ganja. It is also stated in our books that insanity is often due to ganja. I have thus held this. I cannot myself set down any proportion. I have found many

* Summoned to attend at a sitting of the Commission for oral examination, but was unable to appear.

cases set down to ganja. I cannot give any opinion as to the percentage from my own experience. I only know what has been stated to me by others. From my own experience, however, I am strongly of opinion that the excessive use of ganja is sometimes the cause of insanity.

Question 44.—The bullock driver I refer to was five or six years in my service, and is now a cultivator of respectability. I do not know whether he was a regular smoker. He used to smoke when we were on long fatiguing journeys. He was a good and trusty servant.

Question 45.—The opinion which I state regarding the connection between ganja and insanity is based on my experience. There was a case in Sironcha. A Native Christian named Francis was a constable about twenty-three or twenty-four years ago. His case stands out in my memory, for I knew him well. He had no liquor habit. He took to smoking ganja. I saw him one day dancing about outside kacheri in a very excited state. He had to be put under restraint. He was (as far as I remember) sent to the Nagpur Asylum, and I lost trace of him. He was only 21 or 22 years of age. I knew a little of the family; and I did not know of any insanity in his family. I do not remember his parents. I knew him in hospital. He had no epilepsy or syphilis to cause insanity. I knew nothing of any admixture being used. I had had complaints of the man's use of ganja. I do not remember how long he was under observation before being sent to the Asylum. I was then doing magisterial work as well as my own duties in Sironcha.

I remember a case of two banyas who were travelling. They met people who induced them to smoke ganja in a friendly way; there was no crime in this case. The banyas had never smoked before. One of them disappeared. He had gone into the jungle. Search was made. The man was found three days later quite off his head. He was off his head under my observation for about a week also. He recovered gradually and completely. The other man was not affected. The affected man was incoherent, but not violent. When he recovered, he remembered the smoking but nothing later. This case was over twenty years old. The man was about 26 or 28 years old, a strong and well-developed man, with no appearance of being accustomed to the use of drugs.

I can give no recent instances of a man going off his head from ganja.

The case above recorded is the only case of insanity in a constable due to hemp drugs that has come before me in my service. I know of no cases of dismissal from the force arising from men going off their head from ganja.

I have no doubt whatever from my Indian experience that ganja may be a cause of insanity. I believe the two cases I have given above to have been due solely and entirely to the use of the drug. The diagnosis of ganja insanity is attend-

ed with great difficulty, for there are no characteristic symptoms I believe. I could not diagnose a case of ganja insanity with the aid of existing literature on the subject. I do not know the physiological action of the drug experimentally. Ganja insanity is looked on as a variety of toxic insanity. Insanity caused by a poisonous drug is toxic insanity. Alcoholic insanity is another example. In it there are tissue changes in the brain. I have no experience such as would enable me to say whether there are such tissue changes with ganja or not. Nor can I say whether there would be any particular symptom or group of symptoms running through a series of cases. The diagnosis of ganja insanity would be based on a combination of symptoms and the history of the case. In asylum cases we get (1) the statement of the Civil Surgeon as to (a) what he has observed himself, and (b) what has been communicated to him by others; and (2) the Police report forwarded by the Magistrate in a prescribed form. It is filled in by the police. In the case of sending a lunatic to the Civil Surgeon for observation the Magistrate sends an order with the form or statement filled in by the police. Then the Civil Surgeon fills in his medical certificate. The same police form is sent with that medical certificate to the asylum when the man is sent there. I have never, as Civil Surgeon, seen any necessity to alter anything in the police form. I attach no importance to the form as enabling me to decide the question of the man's sanity or insanity. It may throw side light; but the opinion of the police has no weight with me whatever. The Civil Surgeon's certificate refers to the man's condition during the period of observation only. The Asylum Superintendent has nothing to go on in regard to the history of the case prior to that period except the police form. In assigning a cause to madness, the previous history is of course the most important matter. As a rule, the Civil Surgeon would not make inquiry into matters beyond the form or statement referred to. But I have often made inquiries from relations who have come with a case so as to try to get some history. I think the form is generally signed by the police. I would not accept without question the police statement that ganja was the cause of insanity in cases when the form showed no other cause. I would accept it provisionally or tentatively. I would not order further inquiry. I would not attribute the insanity to anything else unless something occurred to show that this was clearly not the cause. I think that there is a tendency to assign causes too readily; and I quite agree with what Dr. Rice, then Civil Surgeon of Jabalpur, said in the Lunatic Asylum Report of 1880, regarding the untrustworthiness of the material at our disposal. In cases of rapid recovery I should be disposed to assign ganja as the cause of insanity if there was any previous history of the drug. I would not accept the theory that ganja is only an exciting cause of insanity in persons already predisposed to insanity.

36. Evidence of SURGEON-MAJOR H. K. MCKAY, Civil Surgeon, Nagpur.

19. Charas is not used in Nagpur. The leaves of ganja are used in Nagpur by the ordinary consumers to make a drink, and also bhang massala. The Marwaris use the true bhang, which is very expensive.

23. No.

28. Twenty grains of ganja form one chillam, and the price is one pice. An habitual ordinary consumer will smoke three or four pipes a day—one in the early morning, one at midday, and one or two at night. The excessive consumers may smoke to any amount.

29. Tobacco is ordinarily mixed, and very exceptionally dhatura, and this by excessive habitual consumers to increase the strength of the drug.

Bhang massala is made of bhang, eucnber seeds, sugar, rose leaves, ajwain, aniseed, sweet almonds, black pepper, poppy-heads. These are mixed in a mortar with a neem stick, and often a copper coin is included.

The bhang in Nagpur is the leaf of the ganja (chur).

30. Ganja smoking is often a solitary practice, for people are often ashamed of the habit, but either cannot or do not care to leave it off. It is chiefly confined to the male sex. It is never consumed by children.

31. It does, I think, depend on the moral strength of the individual, and is like smoking in this respect.

32. Bhang drinking is a part of the religious ceremonies at the *Holi*, *Dussera*, and also at marriages, specially amongst the Marwaris. I do not think it is essential. Those who do not care to drink can rub some on their foreheads. In the case of a very strict religious man, I should think the habit would be confirmed. At the ceremonies the amount drunk is usually moderate.

36. No.

37. I have no experience of charas smoking.

39. I should think smoking has a more deleterious effect than drinking. It does, I think, give rise to a form of temporary insanity; but I see no reason to suppose it is more the cause of insanity than alcohol or excessive venery.

40. Bhang is used in dysentery, dyspepsia, piles, bronchitis, and also as a tonic. Ganja is used for tetanus, and so is charas.

41. Ganja is used to create an appetite and to give staying-power. Bhang is used as a febrifuge pretty generally.

42. With regard to the moderate use of the drug I cannot say it is beneficial, nor would I

like to say that it is harmful. I should think it goes like smoking in this respect.

44. Its effect on the habitual consumer is exhilarating and refreshing, creates an appetite, and its effects last from one to three hours.

47. I should say no.

49. It is an aphrodisiac. Is not used by prostitutes. I do not think it tends to produce impotence. If it is a fact that it is an aphrodisiac and used as such, the excessive venery would produce impotence.

Majum in Nagpur is prepared as follows :—

One part ghee, 8 parts of ganja (flowers), and 40 parts of water.

The ganja and ghee are mixed with water and heated gently for a few hours. It is then put into a thick cloth and forcibly pressed through. The strained fluid is then mixed with sugar.

Kaishree majum is the same mixed with saffron.

The residue in the cloth is pounded and mixed with gram flour and is called “fakee.”

Note by Dr. McKAY appended to his evidence.

From what I have been able to find out, there is a species of jowari grown in the cold weather for hot weather consumption called Ringui jowari.

This is cut and stored and the cattle are fed on the stalks, and the grain is eaten. Cattle are also allowed to graze in the fields on the shoots of the short stems, and they often pull up the roots. It is believed that the root is poisonous and accounts for a great deal of the mortality amongst cattle. This root is tied in bundles and suspended in the country liquor to make it more intoxicating. I have endeavoured to obtain some of the roots, but it is too late. I understand that the root of the white oleanders is often substituted for aconite root.

Lunatics who have been admitted, the alleged cause being ganja.

Serial No.	No. on General Register.	Names.	Sex.	Date of admission.	Ganja smoking.	Previous admission.	REMARKS.
1	381	Bairao	M	1st Jan. 1874 .	Ganja smoking .	18th July 1870	See No. 272.
2	457	Dyaram Teli (c) . .	M	10th Feb. 1876 .	Ditto . . . . .	.....
3	495	Pancham Chawar . .	M	23rd Mar. 1877 .	Ditto . . . . .	.....
4	543	Mussamat Mookie . .	F	3rd Oct. 1878 .	Majum	3rd Aug. 1872 .	See No. 335.
5	575	Mussamat Shaishama .	F	25th Oct. 1879 .	Ganja majum . . . . .	.....
6	750	Jairam Panth	M	22nd June 1887 .	Ganja smoking .	30th Sep. 1884 .	See No. 665.
7	767	Balkrishna	M	24th Dec. 1887 .	Ditto . . . . .	.....
8	798	Sheoram Dalal	M	9th July 1889 .	Ditto . . . . .	.....
9	848	Balli Soonar (c) . . .	M	1st Sep. 1891 .	Ditto . . . . .	.....
10	863	Atmaram	M	28th June 1892 .	Ditto . . . . .	.....
11	867	Tajoodin	M	26th Aug. 1892 .	Ditto . . . . .	.....
12	871	Itwargir	M	15th Oct. 1892 .	Ditto	28th Nov. 1891 .	See No. 854.
13	876	Akbar Khan	M	21st Nov. 1892 .	Ditto . . . . .	.....
14	902	Roodia Mahor	M	25th May 1893 .	Ditto . . . . .	.....
15	903	Dhansingh	M	15th July 1893 .	Ditto . . . . .	.....
16	906	Chouth Mull	M	13th Aug. 1893 .	Ditto . . . . .	.....
17	907	Kalekhan (c)	M	14th Aug. 1893 .	Ditto . . . . .	.....
18	911	Pochatti	M	16th Sep. 1893 .	Ditto	6th Sep. 1886 .	See No. 726.
19	136	Kale Khan Berar . . .	M	20th May 1892 .	Ditto . . . . .	.....

Remarks.

I do not think the asylum is the proper place in which to study the effects of ganja smoking.

Out of 155 inmates there are only 19 where there is a doubtful history of ganja smoking, and I have the names of 22 more who say they have smoked the drug, that gives 41 out of the total, or 26 per cent.

The people who could give the best information would be the malgnzars of the different villages, for there is no doubt that there are a very great number of cases of temporary insanity lasting a week due to the smoking of ganja, of which we hear nothing.

The drug is doubtless an exciting cause of insanity along with drink, but I am inclined to believe that in India it is more the cause of crime than drink is, owing to the sudden and excessive excitement which is one of the first symptoms.

In very few of the cases admitted as from the effects of ganja smoking have we a positive proof that the man ever smoked the drug. Take the case of Bairoo; he was admitted on the 18th July 1870; was found wandering about and was supposed to be dangerous. He had just been deserted by his wife. He was discharged three months after and was re-admitted in 1874; supposed cause ganja, but in this case the desertion of his wife was the immediate cause which unhinged his brain.

He has never been violent, and I should say that this insanity was not due to the drug.

Case No. 2.—We have a history of ganja smoking, and unnatural and irrational violent excitement, the period of excitement being an utter blank.

Case No. 3.—There is no reliable history of ganja smoking.

Case No. 4.—Is certainly very doubtful. She is practically dumb and has a small deformed head and is evidently deficient in intellect. Ganja may have been the exciting cause.

Case No. 5.—*Mussamat Shaishama.*—There is a history of ganja smoking, and this may be the cause.

Case No. 6.—He is intemperate and dissolute, and also a great ganja smoker. This latter drug may have helped to produce insanity, and I dare say it was under the influence of the drug that he attempted to throw his brother's child into the well.

Case No. 7 is doubtful, and so is *No. 8*. *No. 9* is due, I think, to the immediate effects of ganja, except in this case the man knew that he had committed some offence, for he ran away.

10. Atmaram.—This man states that he now and then smoked ganja. He has apparently been insane for seven years. There is no history of violence or very unusual excitement, and I very much doubt if ganja smoking has had anything to do with his present condition. It is very doubtful if he even ever smoked ganja, for it is utterly impossible to believe what he says.

11. Tajoodin.—There was no history sent with this man, and very little that is reliable can be obtained from him. The Magistrate says that the cause of insanity was unknown. The medical officer of the dispensary, Kamptee, says that he is supposed to be a great ganja smoker. The man has occasional fits of excitement followed by depression, and he has lately become very suspicious, shies at everything he passes.

Here again the ganja smoking is doubtful. He has apparently been known to have been insane for five years, and during that time there is his history of violence.

12. Itwagir.—No history was sent with this man. He is a beggar. He was admitted into the asylum violent, noisy and filthy, abusive and incoherent. Beyond the man's own statement it is not certain that he ever smoked the drug.

Akbar Khan.—This man was also a beggar; used to sit at a certain spot in the city, and had been doing so for years. He is supposed to be a ganja smoker, but there is no evidence beyond his own word that he ever smoked the drug. He is a great talker, very abusive, but is never violent.

Rudraya.—This man is also a beggar, and has no friends or relative. The supposed cause is excessive ganja smoking. He certainly when admitted showed signs of violent mania, which may have been caused by smoking ganja, but there is little known about him before he was found sitting on the banks of the river.

Kalekhan.—There is here a history of ganja smoking, but can we put down the ganja as the predisposing or the exciting cause? He was very depressed with occasional fits of excitement the first few days of admission, and these fits of excitement continue, but with longer intervals.

Case No. 14.—Was not due to the effect of the immediate consumption of ganja, for the attack was premeditated.

Case 15 is very doubtful.

Case 16 is more of a religious mania.

Case 17 is no doubt a ganja smoker.

Case 18 is due possibly to ganja, for he does not realise what he is doing.

Out of these 18 cases, only 3 or at the most 4 can be put down as the result of ganja smoking.

Ganja smoking would, I think, have more effect on the poor, especially the beggar class, and so cause insanity, but poverty and want of food and ill-usage must also be taken into account.

Lunatics at present in the Asylum who are declared to be ganja smokers by either the Police or Magistrates.

1. Bairoo—Was deserted by his wife, and was admitted for acute mania. Was discharged a few months after cured.

Three years after was re-admitted for chronic mania. The warrant states that he is a ganja smoker.

Remark.—I cannot think this case can be put down to ganja; the primary cause was the desertion by his wife.

2. Dyaram.—I think this a genuine case of ganja smoking. There is no history of this man previous to his committing the crime.

The symptoms are those I should put down to ganja, that is, a sudden fit of paroxysmal insanity and forgetfulness of what had been done.

3. Pancham Chamar—Was admitted into jail and diagnosed as acute mania. Is supposed to be a ganja smoker, but I do not think the symptoms are those of ganja smoking.

4. Mussamat Morki—Was first admitted in 1872, and was then considered to be congenitally deficient in mental power; power of speech imperfect. Five years after she was discharged, and 27 days after was re-admitted for chronic dementia

and the supposed cause majum. She certainly had not had majum when in the asylum, and the only opportunity she had was during the 27 days.

This is a very doubtful case.

5. *Mussamat Shaishama*.—There is a history of ganja smoking, but the symptoms in this case are in no way different to those of a Eurasian female, Mrs. Inglis, who certainly is not a ganja smoker, nor given to excesses of any kind. Ganja perhaps in the case of Mussamat Shaishama is the exciting cause, but I cannot help thinking that she was predisposed to insanity, and any excitement would produce the same result.

6. *Jairampanth*.—Was first admitted as acute dementia, cause unknown, was discharged one year after, and re-admitted for chronic dementia due to ganja smoking; but there is no certain evidence that such is the case.

7. *Balkrishna*.—Supposed cause is ganja smoking. This I think is a case of a paroxysmal insanity due to some neurosis and possibly congenital.

8. *Sheoram*.—Beyond the man admitting that he used to take ganja I do not think there is any other reason for connecting the insanity with the drug.

9. *Balli Soonar*.—This is, I should say, the result of ganja smoking. Sudden violent paroxysm and forgetfulness of what was done.

10. *Atmaram*.—This man appears to have been sane until he went to jail at the age of 20 and became insane in the jail and has remained so ever since. Supposed cause "perhaps ganja." There is no history of the man ever having smoked ganja, and his symptoms would not lead me to suspect it.

11. *Tajdin*.—Supposed cause ganja. Here again the symptoms would not lead me to suspect ganja. There is not that sudden violent excitement which one associates with the use of the drug.

12. *Itwargir*.—Admits having been a ganja smoker, and perhaps this case might be put down to the drug, but it is not a characteristic case.

13. *Akbar Khan*.—This man has been a lunatic for years and will admit anything, but I cannot include this case.

14. *Rudra Mehra*.—This man is a beggar, and has apparently been insane for years. I do not think his symptoms would lead me to say that ganja was the cause.

15. *Dhan Singh*.—Admits being a ganja smoker, and the insanity may be due to the drug, at least ganja may have been the exciting cause.

16. *Chouth Mull*.—Religious mania.

17. *Kale Khan*.—Says he has smoked ganja, but the symptoms do not lead me to suspect that ganja has had anything to do with the insanity.

18. *Ramsha*.—May be due to ganja, but it is a doubtful case.

Men who acknowledge to have smoked ganja daily, but not admitted as toric insanity.

1. *Kishna*.—This man says he smoked several chillums a day, but the symptoms shewn by him are not I think symptomatic of a ganja smoker.

2. *Ando*.—I would not put this case down to ganja.

3. *Maha Singh*.—Admits being a ganja smoker and the insanity may be due to the drug. He suddenly had a fit of violence and in the fit killed his child, and recollects nothing.

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4. *Rajaram*.—A confirmed ganja smoker, but from his symptoms I do not see any cause for thinking the insanity is due to the drug. He is suffering more from religious mania.

5. *Thaysa*.—Epileptic insanity.

6. *Ganga Dhur Rao*.—Says he smoked ganja twice or three times a year, but I cannot attribute the insanity to the drug.

7. *Larooman*.—I think the murder in this case was done under the influence of ganja. There is the sudden violent excitement and the forgetfulness of everything that occurred during the fit.

8. *Peeroo*.—I cannot put this down to ganja, because he appears to have known what he did and made excuses. He has occasional fits of excitement preceded by injection of the conjunctiva.

9. *Vittoba*.—This man says he smoked several chillums daily, but I do not think his insanity is due to the drug.

Oral evidence.

Question 29.—My statement about dhatura being very exceptionally used, is based on information. I myself have only come on one case in which the man admitted it. He said that one seed only was used at a time by him. He (Rajaram) thought that 2½ seeds would be an overdose. I think dhatura would increase the intoxicant power of the drug and also tend more to brain mischief. Rajaram was not a fakir, but regarded himself as a holy man and devoted to religious practices. The natives say that the copper coin is used because verdigris increases the power, and that the neem stick is used to give a good taste. I found in a recent *post-mortem* the presence of aconite. On inquiry I found that the man used aconite with his ganja. This was being discussed with his friends; he said it was harmless; and he swallowed a dose equal to what he ordinarily used with his ganja. It killed him. This would show that smoked with ganja the aconite became innocuous. This may be due to the effect of heat. I have not heard of arsenic or anything called "jawari root" being used with ganja. I shall inquire and report.

Question 32.—The rubbing of bhang on the foreheads on religious occasions is stated to be done in conformity with caste rule or custom.

Question 39.—I think smoking more deleterious than drinking, (1) because I do not know that good bhang has the same amount of the deleterious ingredient as the ganja, i.e., the cannabine; and (2) because in smoking, the drug is more quickly absorbed and has less chance of being changed in character. I am not prepared to say that the consumption of ganja by smoking is more hurtful than the drinking of alcohol. The latter produces disease. I am not prepared to say that ganja does. Alcohol affects the liver, kidneys, etc. I do not think ganja does. Ganja is said to produce bronchitis, etc., but this effect is probably more mechanical than due to the absorption of the poison. I am not prepared to deny that ganja may thus produce asthma or bronchitis; but it is not proved. I have no case in the asylum of these diseases, though I have several patients who admit, and are reported to have, the ganja habit.

Question 41.—Bhang is used by many up-country people here. They called it thandai, and they regard it as a febrifuge, as well as cooling drink. They also take it before meals as a digestive. My experience of the use of bhang is based

mainly on my knowledge of the police, of whom many are up-country men. I have never recognized any connection between bhang and rheumatism, and see no reason why there should be any. There is very little true bhang used in this province. It is more the ganja leaf.

Question 45.—I have had twenty years' experience in India. I was two or three months in Cumberland Asylum before coming to India as Officiating Assistant Superintendent. I did not specially study the subject of insanity. I have been a year and-a-half in charge of the Nagpur Asylum. Before that I was three months in charge of the Jabalpur Asylum. I know of no literature dealing with special forms of insanity seen in India. My experience leads me to think that climate does not modify the symptoms of particular types of insanity. Toxic insanity is used to denote that the insanity has been produced by some such drug as alcohol, ganja or opium. Any insanity produced by any drug would be called toxic insanity. This may include dhatura. The question, of course, first to be decided, is whether any drug produces insanity. I am not prepared to say that hemp drugs produce insanity, *i.e.*, that they are ever the predisposing cause of insanity. Dr. Hack Tuke's remarks on toxic insanity shown to me, indicate that the name is applicable to dementia, mania and many other types of insanity. It is a name given to insanity owing to its supposed cause, not owing to its symptoms. Alcoholism might attack so many parts of the body that one might have different symptoms in a series of cases. But in case of alcoholic brain mischief one would expect to find the same symptoms running all the way through the series. So also one would expect to find one or more symptoms in the case of toxic insanity from hemp drugs. In such cases I find that a man has a sudden fit of insanity, he comes to his senses a short time afterwards, and the previous period of his insanity is a perfect blank to him. The case of Maha Singh in the Nagpur Asylum is a case in point. He says he smoked ganja. He has no recollection of the death of his child, which he had himself caused. In regard to ganja cases, I am unable to point to any symptom which I regard as diagnostic, except the suddenness of the attack, *i.e.*, the sudden paroxysm. There are no objective symptoms. When a case comes to the asylum, it sometimes happens that the man is sane. He is sent (*e.g.*, Baliram) as ganja insane who has (as in that case) committed murder. The history of the case determines the diagnosis in such a case as that. If the alleged ganja lunatic comes into the asylum insane, I keep him under observation and then proceed to diagnosis. That would be based on the sudden paroxysm in which the man has no delusions and the suddenness of the recovery. Such paroxysms may recur without a fresh dose of ganja. It can only be regarded as a supposition that ganja has produced the insanity. I am not prepared to say that I am satisfied that hemp drugs ever produce insanity, *i.e.*, that they are

ever more than the exciting cause. The entry of ganja as a cause is generally due to this, that it is the custom to copy on the top of the history sheet the entry of "supposed cause" made by the magistrate or the police; and this entry is copied into the returns. We are not in a position to judge of this, to disprove it, or to correct it. We do not consider it right or necessary then to dispute it. In criminal cases, the cause is taken generally from the judgment of the court. I have never ascribed the insanity to ganja from diagnosis of my own motion. We have to accept these police or magisterial histories; for we have nothing else. Within the last five or six months it has been ordered that we are to receive copies of judgments and any thing in the police reports throwing light on the cause of insanity. Before that no steps were taken to elucidate the history of any case.

I have prescribed *Cannabis indica*. I give this as a nerve tonic. I have no other experience of the physiological action of the drug. I mean I have no experience of that action apart from the use of the drug as a remedial agent. I do not know what the physiological action of hemp preparation is.

I do not think that redness of the eyes is of the slightest value as a diagnostic mark of ganja. I have seen cases of insanity in which the periodical fit is preceded by redness of eyes. One case is that of Peru, whose insanity is not alleged to be due to ganja. This redness of eye may be regarded as associated with brain mischief.

I do not know any case of ganja being used to alleviate the symptoms of approaching brain mischief.

I have never come on a case of insanity from belladonna, nor from dhatura. I do not remember having read of any such cases.

I do not think that the symptoms of dhatura poisoning are the same as those of ganja. The former would act more upon the larynx, *etc.*; the latter on the brain more immediately.

Hemp drugs could not in my opinion excite insanity in a healthy brain. Therefore, when I speak of hemp drugs as an exciting cause of insanity, I imply some predisposition towards insanity.

Sometimes patients ask for ganja. I have noted that there are three patients who have undoubtedly the ganja habit. These include those who ask for it. To give such a man tobacco satisfies him. He knows, of course, that he will not get ganja; but there is no great craving for ganja.

I think that if ganja were able to cause insanity in healthy subjects, we should have far more of it. We have 10,000,000 (ten millions) of people in the Central Provinces; and here and in Jabalpur we have not more than three dozen people whose insanity is ascribed to ganja. The history in these cases even is doubtful.

37. Evidence of SURGEON-MAJOR W. A. QUAYLE, Civil Surgeon, Nimar.

1. I have resided four years in a district where Indian hemp is extensively cultivated, and where it is easily procurable in the adjoining Native States.

2. The terms siddhi, sabji and putti are but little known to the people of this district.

Settlers from Northern India are, however, acquainted with them. The definitions bhang, charas and ganja are those chiefly used. The ganja manufactured here is the flat variety, prepared by being trodden under foot for four days in the sun.

19. Charas is scarcely at all used in this district.

There is, therefore, no evidence of value to be obtained regarding its consumption. Ganja is almost wholly used for smoking. Very occasionally, however, in those addicted to the excessive use of the drug, it is prepared in the same way as bhang and drunk.

23. I can obtain no evidence of the use of bhang for smoking. It is said never to be used for this purpose. Probably the small amount of the active principle contained in the leaves precludes its being consumed in this manner.

28. *Charas*.—Little used in the district, and hence no evidence as to its consumption.

Ganja.—Habitual moderate consumers take about 22 grains two or three times a day—cost $\frac{1}{2}$ to $\frac{3}{4}$ anna. Habitual excessive consumers take from $\frac{1}{2}$ tola to 2 tolas per diem—cost 1 to 4 annas. Jogis use larger quantities than these; in fact they smoke a chillum every hour or two.

Bhang.—Moderate consumers take $\frac{1}{2}$ to 1 tola daily—cost 3 to 7 pies. Excessive consumers, 1 tola to 5 tolas—cost 7 pies to 3 annas.

29. Tobacco is always mixed with ganja. Exceptionally two to four dhatura seeds are added to increase the intoxicating effect by those who use the drug excessively. For the sake of the aroma, nutmeg, cloves, cardamoms, betelnut and sandalwood are sometimes added.

Bhang is almost invariably mixed with massala, which consists of black pepper, cardamoms, rose leaves, almonds, cucumber and melon seeds, poppy-heads and endive. Milk and sugar are also added to the bhang liquor. Occasionally even in bhang one or two seeds of dhatura are added.

30. The consumption of these drugs is generally practised in company, rarely in solitude. It is mainly confined to the male sex. Respectable women very rarely use it. The consumption of the drug among women is confined to prostitutes. Children never use it. Among the Marwaris boys above 10 or 12 are occasionally given bhang during the *Holi* festival and in the hot weather as a *thandai*; also the women of this caste now and again take bhang during the *Holi* festival.

31. The habit is easily formed by young people sitting in company with their elders who are smoking or drinking the drug, and, like all other habits, it is hard to break off; but not so difficult as in the case of the opium habit. Ganja smokers, when confined in jail and suddenly deprived of their usual dose, do not appear to me to suffer in health or otherwise. The tendency to excess does not seem to be great.

32. During the *Holi* festival ganja is smoked and bhang drunk by a great many who do not on other occasions use it. The chillum at these times is passed round the circle, or a gurrak of bhang is prepared, and a lota-ful handed from person to person. During this festival there is a tendency to excessive use of the drug; but it does not generally lead to the habit being formed. The custom of taking ganja or bhang is not essential to the observance of the festival.

The Marwaris and some other high castes use bhang throughout the hot weather, morning and evening. They consider it a refreshing and invigorating drink; and the Marwaris are energetic and capable men of business. Their grown up boys and women occasionally also drink a little at this time.

35. The moderate use of ganja and bhang among the natives of India is analagous to that of alcoholic drinks among Europeans, and, as far as ordinary observation goes, the effects are no more injurious in one case than the other. Any action

that would deprive the people generally of their accustomed dose of ganja, etc., would not, I consider, be politic.

36. I have enquired both of the high and low castes, and find no evidence for believing that alcohol is taking the place of ganja, or ganja the place of alcohol. As regards the low castes, I am strongly inclined to credit all I have heard. These people are addicted to the use of country liquor and have no desire for ganja, notwithstanding its cheapness, when compared with mhowa liquor. The higher castes chiefly use ganja, and among them liquor drinking is considered a habit to be reprobated. It is possible that secret liquor drinking is on the increase; but positive evidence on this point is difficult to obtain.

37. In bhang drinking the stimulating and sedative effects come on more slowly and last longer than in ganja smoking. In the latter the effects are rapidly produced (the active principle being absorbed quickly by the lungs), and pass away in two or three hours. Further, the quantity of the active ingredient in ganja is much greater than in bhang.

39. Smoking ganja appears more injurious, because ganja contains more of the active principle than bhang. It is more readily absorbed in the form of vapour by the lungs, and for smoking it requires no lengthy preparation; hence it is more resorted to.

40. Indian hemp appears to be little, if at all, used by native doctors. Possibly they are disinclined to divulge their remedies. There is no evidence of the drug being given in cattle disease. Sometimes bhang is given to bullocks about to start on a long journey in order to increase their staying-power. It is also given to horses during the hot weather when they are out of condition, lose appetite, and pass high-coloured, muddy urine. Before opening small abscesses, villagers sometimes give ganja or bhang; and I am told majum is also given to Musalman children before the operation of circumcision.

41. All consumers inform me that it increases the appetite and assists digestion. They also say that when travelling on a long journey or waiting many weary hours at a kacheri, a chillum of ganja or a drink of bhang wonderfully sustains them. I am also told that consumers working in or travelling through malarious jungles are less liable to attacks of fever.

42. I have no evidence that the moderate use of these drugs is other than harmless. Neither in my general dispensary or jail practice have injurious effects resulting from the use of the drug been observed by me. During a period of four years, I can only call to mind two cases of insanity in which there was a history of the excessive use of the drug; but it does not follow from this that the drug was the cause of the mental disturbance.

44. The first effects are a pleasurable excitement, not amounting to intoxication. It refreshes and increases the appetite. The effect lasts for two or three hours. Its after-effects are of a sedative nature, though sleep does not always follow. The want of the drug renders the person uneasy, restless, and disinclined for exertion.

45. I have no evidence that the moderate use of the drug produces any noxious effects, such as those given in the question.

46. The excessive use of the drug appears to deaden the intellect and to produce a condition of stupefaction in which the person thinks of and cares for nothing. Sometimes tremulousness of

the muscles occurs. Bronchitis is not uncommon among those who indulge excessively; but this may be owing to neglect and exposure. Insanity must be a rare consequence, else one would expect to find most of the sadhus insane, which in my experience is not the case.

Cases of insanity associated with the excessive use of Indian hemp.

Case I.—Udai Ram, age 47, Tahsil Jamadar, Burhanpur, in which place he has lived for 20 years; caste, Chhipa. **History.**—He was brought to Khandwa in February 1891 suffering from simple mania. His first symptoms were an increased excitability and irritability, he becoming very angry about trivial matters, abusing people without reason in the bazaars, and interfering with their property, neglect of his duties. He commenced riding about the country on a pony, which he eventually lost. He was foolishly extravagant, purchasing useless articles at high prices. At Khandwa he was excitable and indignant at being kept under restraint and not allowed to go home. He was constantly in motion, walking round the station two or three times a day with his attendant, and at other times performing rather ludicrous gymnastic exercises. He was loquacious, talking to every one he met, sometimes incoherently, but at other times sensibly enough. One of his delusions was that he had been appointed "diwan" to a certain Raja, and that he had boundless wealth at his disposal. The man was transferred to the Jabalpur Lunatic Asylum at the end of March 1891. The Civil Surgeon writes that he died there on the 7th September 1893 of general paralysis of the brain, but that no *post-mortem* examination was made.

In this case there is no hereditary history of insanity or nervous disease. The most important point elicited was that the man had been a ganja smoker for many years, and latterly to excess. He was also addicted to bhang drinking and majum eating; and of the latter substance about half a seer was found in his house. This majum he usually obtained from Ujjain.

The two causes, singly or combined, that are chiefly said to produce general paralysis of the brain among Europeans are sexual excesses and intemperance, especially if impure and bad alcoholic drinks are used; and there is no reason to suppose that Indian hemp consumed in excess might not play the part of alcohol in the production of the disease among the natives of India.

Case II.—Abdul Rahman, a Pathan, aged 32, a resident of Raver, a village 10 miles from Burhanpur. His father died when he was a child; his mother is still living. His relatives are petty shop-keepers, selling cloth, bangles, etc. Abdul himself has not followed this occupation, but appears to have led a somewhat idle life, occasionally keeping a small village school for the instruction of Muhammadan children.

The form of insanity from which he now suffers is simple mania, and the history of the attack is as follows:—About a year ago he went to the Berars to visit a fakir and became initiated as his disciple. After his return he resumed his duties as teacher, and no symptoms indicating mental disease were at first noticed for a couple of months until he took to ganja smoking. It is stated that he continued this practice to excess, and finally, in the course of a few months, his first symptoms showed themselves. His people attribute the insanity to excessive ganja smoking, and he himself admits that he uses it. There is no history of heredity, of

opium eating, or other cause. His symptoms are, an aimless desire to leave his home and wander into the adjoining villages, entering other persons' houses uninvited. He is sometimes irritable, and he is easily excited by opposition, when he becomes very abusive and even aggressive. Ordinarily he is quiet and talks sensibly; but in the course of any conversation he generally becomes incoherent and wanders away to irrelevant subjects. For instance, when I was speaking to him regarding his usual mode of life, he suddenly began to talk of the sun and moon. As I mentioned before, there is no known or admitted heredity; but natives will not readily disclose such facts.

47. The children of the ganja smoker often take to smoking; but this is more from association than from any hereditary predisposition; for the children of ganja smokers—even of excessive smokers—look as healthy as others.

48. The answer to this question is the same as the above.

49. One and all say that it has no aphrodisiac effect whatever, and this question may be taken as settled. Prostitutes use the drug, not for its aphrodisiac effect, but rather to blunt their sensation and render them oblivious of their profession. I have seen strong healthy children born of habitual excessive ganja smokers after the period when they commenced the habit. This disproves the assertion that impotence results therefrom.

50. The answer to question 49 also replies to this.

56. Dhatura is mixed with ganja used in excess, and, so taken, the dhatura must affect the mental functions very powerfully, increasing the intoxicating effect and producing delirium and temporary insanity. In dhatura poisoning the person often tears off his clothes and wanders about quite out of his mind for one or two days. The effect on the brain of moderate doses of dhatura continued for some time must be also injurious.

57. I have no experience under this head.

Oral evidence.

Question 29.—Are the aromatic admixtures used with ganja for smoking?

Answer.—Yes, occasionally. Betelnut is used only for the aroma, not for increasing the intoxicating effect.

Question 31.—Opium smokers suffer from deprivation of their drug, and when confined in jail, beg for it. Do ganja consumers beg for their drug in the same way?

Answer.—Only once did a well-to-do Musalman in the civil jail complain that he could not sleep in consequence of his drug being stopped, and begged for it.

Question 35.—Why do you say that hemp is not more injurious than alcohol?

Answer.—I should have expected to see more sadhus insane, who all smoke ganja and consume bhang immoderately.

Question 45.—You have not had charge of a lunatic asylum or had special opportunities of making observations with reference to insanity?

Answer.—No, I have mentioned the only two cases I have observed. I have been fourteen years in service, and served in Madras and Burma.

Question.—You have not had any ganja consumer under long-continued observation?

Answer.—No.

Question.—On what ground do you state that moderate use is harmless?

Answer.—I have seen many consumers and noticed no bad effects.

Question 36.—We are told by other witnesses that ganja is consumed by the lower classes. You have made a different statement with reference to classes who consume liquor and hemp.

Answer.—I adhere to what I have said that in this district the lower classes consume liquor, and the higher the hemp drugs.

Question 40.—You say that Indian hemp is little used in native practice. What has led you to that conclusion?

Answer.—I have made enquiries and the statement is correct for this district. So also I have questioned villagers about the use of hemp as a medicine for cattle.

Question 41.—When you say it increases the appetite, to what drug do you refer?

Answer.—To both ganja and bhang.

Question 42.—Have you used preparations of hemp in your own practice? In what form?

Answer.—Yes—tincture and extract.

Question 46.—In the two cases of insanity you have described, are you able to say that the insanes had not indulged in alcohol or dhatura?

Answer.—I am pretty confident that in the second case nothing but hemp had been taken. His people were very positive on the point. In the first case also I am sure alcohol had not been taken.

Question 44.—In answer No. 44 do you refer to ganja as well as bhang?

Answer.—Yes.

Question 46.—Could you not say that tobacco as smoked in this country would also cause bronchitis?

Answer.—No; people do not seem to suffer in the same way from tobacco.

Question 46.—Do you attribute the paralysis of the brain which is described in the first case under question 46 to the use of hemp?

Answer.—Yes; at the same time I have reason to suppose that the insane had been given to sexual excess as he was affected with a disease which follows syphilis. I ascertained by enquiries from persons who had treated the insane that he had suffered in this way.

Question.—Do you consider that hemp was the exciting cause in these cases?

Answer.—That is a difficult question.

Question.—Do you think excess in hemp might cause insanity in a man with healthy brain?

Answer.—Yes; it might.

Question.—On what do you base that opinion?

Answer.—Structural change in the brain might result from the excessive use of the drug. I do not base this opinion upon any case actually observed.

Question.—Can you refer to any recorded cases in which structural change has been discovered by post-mortem examination?

Answer.—No.

Question 42.—You say you have no evidence that the use of these drugs is other than harmless? On what is this statement based?

Answer.—I know several persons who take the drug moderately without suffering in any way.

Question.—You have made no experiment on the subject?

Answer.—No.

Question.—Can you refer me to any literature on the subject?

Answer.—The standard books on Materia Medica, and Chevers's Indian Medical Jurisprudence.

Question 35.—On what do you base the statement that sadhus do not become insane from the drug?

Answer.—I have had opportunities of observing that class among the permanent residents at Mandata.

Question 46.—How did you ascertain the fact in the cases described in question 46, that the men had been smokers of ganja for many years and latterly to excess?

Answer.—By enquiries from relatives and the men's own statements.

Question.—Were there any symptoms to indicate the connection of ganja with these cases?

Answer.—There were none.

Question 47.—You state that the children of excessive ganja-smokers are healthy. Is there no physical deterioration in the smoker?

Answer.—Yes.

Question.—Would not that be handed down to the children?

Answer.—I have not noticed it. My remark is based on some half-a-dozen instances.

Question 49.—Your opinion that the drugs are not taken as aphrodisiacs is not in accord with the general information?

Answer.—The consumers inform me that the drugs are not aphrodisiac. This is contrary to the evidence of the book.

Question.—You have not sought the opinions of others than the consumers on this point?

Answer.—No.

Question 56.—In the latter part of answer No. 56, do you refer to moderate doses of ganja admixed with dhatura?

Answer.—Yes; and I think the habitual use of dhatura would have the effect even when used with moderate doses of ganja. It is generally used with excessive doses of ganja.

Question.—Have you seen any cases of dhatura poisoning?

Answer.—I can recall two well-marked cases.

Question.—Is there any resemblance between cases resulting from ganja and those resulting from dhatura?

Answer.—Yes; they are generally all cases of mania with similar symptoms.

Question.—In the cases described in answer 46, would you have accepted dhatura as the cause of insanity if the history had indicated it?

Answer.—I should have done so in the second case.

38. *Evidence of HON. SURGEON-MAJOR J. E. HARRISON, Retired List, and Civil Surgeon, Kalahundi.*

1. My long service in the medical profession in India of over 40 years.

2. Charas is not used or obtained in these parts. The ganja sold here by contractors under excise rules consists of the loose leaves and tops of the plant obtained from Government Stores, Raipur, and known locally only by its name "ganja."

3. During the Maharaja's time ganja used to be cultivated in this State; but since it has come under Government management, the cultivation has been stopped. I have not observed it growing spontaneously.

5. I should consider the climate of these parts favourable for its cultivation, with an average rainfall of 54".

7. None.

13. Yes, restricted in this State now.

14. None.

18. When very old, the leaf deteriorates; but ganja and its resinous portions keep the active principle good for years. The leaves deteriorate by damp and moisture. To prevent this, it should be kept in well covered vessels. I have been informed that it keeps well in leather bags strung up in the roof of houses.

19. Charas is only used in the Upper Provinces for smoking; it is unknown in these parts.

20. I cannot give the proportion of people who smoke ganja, but mostly all classes smoke the ganja, Brahmans, especially those coming from Puri and Cuttack, Rajputs, Paiks, Mahuntis, Gonds, "Konds Katchina," but not the Kutia Konds inhabiting the hills, and most of the lower castes, the Doms and Ghassies (sweepers).

21. The old hands prefer the round ganja, being stronger in its effects.

22. None used in these parts.

23. The word "bhang" is not used in these parts, but ganja only.

24. Many of the Hindus and lower classes chew ganja with tobacco, and a large number of Brahmans and Mahuntis use it in drink, ground up with black pepper and sugar or jaggery, and some mix spices and milk, when it is called "kúsumba," and is offered in the temples.

25. The ganja is used only for smoking, chewing, and drinking, and is on the increase, as already shown below, and to my own knowledge of over nine years' residence here, many non-users of the ganja have commenced its usage.

The sale of ganja since the introduction under Government excise rules commenced here from the 6th August 1884, and the yearly increase is shown below:—

Date of introduction.	Years.	Quantity of ganja yearly consumed.		
		Mds.	Seers.	Chs.
6th August 1884 .	1884 . . .	...	21	8
	1885 . . .	3	5	7
	1886 . . .	4	22	...
	1887 . . .	4	10	...
	1888 . . .	3	18	8
	1889 . . .	3	10	...
	1890 . . .	3	32	...
	1891 . . .	4	31	...
	1892 . . .	5	32	...
	1893 up to 30th September.	4	1	...

26 and 27. I am unable to furnish the answers to these questions, not being able to get the proportions of the consumers.

28. (a) Habitual moderate consumer's average is about one pice to half anna per diem. (b) The habitual excessive consumer's is about one anna per diem.

29. Opium is sometimes mixed with ganja in smoking, and also tobacco. I know of no preparation such as bhang massala.

30. The extent of consumption is very small in company, and occasional, but most in solitude. It is chiefly confined to the male sex, and not used by the children.

31. The habit of consuming any of these drugs is easily acquired, and not so easily given up; but many of the subji drinkers can abstain from it. The ganjaries or ganja smokers rarely give up the habit, and gradually increase to excess.

32. With Hindus it is often made into a potion with sugar, pounded black pepper and sometimes spices and milk are added, and called "kúsumba," and drunk by many, especially the Brahmans in the temples. This is also much used during the Hindu festival of *Holi*. In native feasts and merriments, a conserve or sweet is made of sugar and strong infusion of bhang of a pale, green or yellow colour, coated with silver or gold leaf. It is also used by evil-disposed men to overcome the modesty of women, and for theft.

34. I do not consider it would be a serious privation to forego the consumption of these drugs; but probably they would fall on other narcotics, such as opium and liquors, especially opium.

35. Yes, of all these drugs the use should be prohibited gradually. Prohibition should extend to the strict prevention of the cultivation in all parts of India under Government rules, and small cultivation should be allowed only for medical purposes. The prohibition would cause discontent to the consumers, but not any serious danger. The prohibition would, no doubt, be followed by recourse to alcohol and other stimulants.

36. No, not in these parts.

37. Charas is more potent, and stronger in its effects than ganja.

38. None, but in the potency of each drug and its quality.

39. None; each of these have their baneful effects on the system. The three drugs affect the brain and intellects. The smokers are prone to chest diseases, and generally cough and asthma and weakness of the heart. The drinkers suffer from stomach disorders and indigestion, and most suffer from dysentery and die. In fevers with the consumer the brain is soon affected.

40. Yes, the baidas administer it in dysentery. For cattle and horses, it is given in the massalas, or mixed with jaggery to overworked animals.

41. In my opinion, none.

(a) In the beginning of its usage in drink it increases the appetite.

(b) It has no staying-power; the consumers are soon tired in labour or exercise.

(c) It is no safeguard to malarious diseases; they suffer as much or more than the non-users.

(d) As a tonic and cooling drink it is largely used by Hindus, mendicants, jogis, sanyasis, and bairagis. A moderate dose is considered to be from half to a rupee weight. The appetising effects are most to the occasional moderate users of the bhang. Charas has not this effect, but their desire is for dainty food.

42. It is not harmless but baneful. First, the moderate users have desire to its increase; secondly, the daily cost, which would help to maintain the family and other comforts; thirdly, it makes the consumers lazy and averse to labour; fourthly, a quiet disposed person becomes fretful and irritable in most cases.

43. Not so; they are quarrelsome and labour under imaginary harm of their neighbours.

44. The immediate effects are a peculiar intoxication and pleasurable feeling, a sort of hallucination of grand waking dream, loquacious, very desirous of amusements, songs, and music, and an appetite for food. This state lasts for about three hours, then follows depression, a desire to rest or sleep; if not, fretful and irritable, and a longing for the repetition of the stimulus.

45. Yes, the noxious effects are physical, mental, and moral. It impairs the muscular powers and nervous system. In time both appetite and digestion are impaired. The consumers are most subject to these diseases, dysentery, bronchitis and asthma. It certainly induces laziness. In the beginning it excites vengery to a certain extent. It over-excites the intellect and produces insanity; but deadens pain, and induces insanity of the type "mania," temporary or permanent. It can be reinduced by its use. The typical symptoms come on generally suddenly—delirium, excitement, restlessness, and attempts to violence. The insanes, when recovered from insanity, do confess to the use of ganja drugs; but some are ashamed to confess the cause. I do not consider it gives relief to persons suffering from mental anxiety or brain diseases, but rather excites them. In my experience, I have not found that any person suffering from either mental or brain diseases has brought on insanity by taking hemp drugs for relief, or that persons of weakened intellect, deficient in self-control, have taken them to cause insanity. The consumer's temperament is also to be considered. I have observed those of nervous temperament to be more prone to insanity in the use of hemp drugs.

Of all the intoxicants used by the people of India, none are so baneful as the hemp drugs. The pleasurable feeling of intoxication lasts for about three hours, and requires gratification and longing, and there is a tendency to its increase. The consumers at this state talk much and largely and their intentions in doing much, but never perform them; least unpleasant act or talk irritates them to anger and abuse; in such fits become lunatics, and commit violence and murder or suicide. During my Civil Surgeoncy of Sambalpur, I met with many such cases.

1. I have a man at present in employ who had become temporarily mad from snicking ganja.

2. The zamindar of Sanda Chukly, in Sambalpur, a smart, handsome man, took to ganja and madak smoking, became insane, and was put under restraint. He got well and was removed to his home, when he again took to his old habit and became insane, and died of dysentery.

3. His younger brother also took to the same habit of ganja smoking and madak and became insane, and died in this place from fever and head affliction.

4. A man living in Burra Bazar of Sambalpur, vendor of native drugs and spices, had a family of a wife and two grown-up children, boy and girl, aged about 19 and 16, respectively. The boy got into the habit of ganja smoking, and had fits of insanity, destroyed things in the house, and beat the people. When he was put under treatment and restraint, he quite recovered, and was removed to his home by his father. He was taken great care of by the parents, and not allowed to go about or smoke ganja. One day the parents and his sister were away from home, the boy being alone, strolled about the house and espied an old leaf pipe charged with ganja stuck in the thatch of the house. He removed this, and lighted the same from the cooking place, and was immediately affected with a fit of insanity. He saw his father's sword hanging on the wall. He unsheathed it and walked about the room. His sister coming in with a vessel of water, he at once attacked her, cutting her fearfully over the head, face, arms, chest, and back, for which she was about two months in hospital, and the boy continued insane, and was transferred to the lunatic asylum, and probably may be there yet.

5. The Mahunth of the temple in this place had been an inveterate ganja smoker. He was troubled with severe cough. One day he suddenly fell down and died, and a quantity of blood poured out of his mouth.

6. When I was attached to Her Majesty's 82nd Regiment, located at Delhi, a few years after the Mutiny, a private soldier, strolling about the ruined native building near Cashmere Gate, was invited into a house by some native females, and was given to drink a cup of bhang sherbet, and was afterwards picked up by some of the men of his regiment outside of the place in an insensible condition. While bringing him to the hospital, he awoke in a fit of madness, and was so violent that six of the men could hardly keep him down. An emetic of sulphate of zinc and a cold douche to the head restored him, and he gave the story of his drink. This man suffered for some time with headache and confusion of thoughts and sleepless nights.

46. The habitual excessive consumers. The answers as above apply to the same questions with this class. The insanity produced is generally permanent. Dull, sleepy looking individuals are most prone to the above-named diseases; but particularly cough and asthma, and feebleness of the general system.

47 and 48. I have no knowledge of this fact.

49. In moderate doses it acts as an aphrodisiac, and I have known it to be used for that purpose, and have been informed that prostitutes in parts of India give it for that purpose, and have known it to be given to soldiers of European regiments—see case No. 6 in answer to question 45.

50. To the persons who are excessive consumers, it certainly weakens the muscular powers and intellect. Most of these men become emaciated and of impaired intellect, and have little or no amorous desires. Many are impotent.

51. They become petulant and quarrelsome and subject to fits of anger, resort to violence, and are averse to labour. Want tempts them to commit theft.

52. The same as above, and more callous. They lose self-respect, and become careless and indifferent to their families and thus hundreds have to work for their living or beg, and many of their females become unvirtuous.

53. Most certainly. I have known many, of which I can give a few instances that came under my observation.

54. I have no knowledge of any.

55. In past years crimes were committed of theft and murder on the high road by inducing travellers to smoke and drink bhang. Often the seeds of dhatura were added, when complete stupefaction was produced. Complete stupefaction can be produced with ganja in drink or smoke. I have attended persons in this state brought to me for treatment.

56. It is generally administered in strong doses and often mixed with dhatura. A strong decoction is made of ganja with the seeds of dhatura strained and kept for the purpose, and, when required, given either in food or in drink.

57. I have not seen charas used in eating, but ganja mixed with tobacco, or made into the drink subji; also a sweetmeat called majum.

58. The system now adopted works well under the excise rules. I am of opinion that more restriction should be put on, and taxation, and only sold by contractors under license.

59. I agree with the proposition made by our late Political Agent, Mr. H. H. Priest, that the users of these drugs should have a licensed ticket for the purchase of the hemp drugs. By this the sale would be restricted. The ticket would be an index of shame to the bearers, and would prevent others from enlisting in the roll. The drug could be sold for medicinal purposes or cattle use, and the name written in the sale book of the vendor.

60. I have been informed that the drug is smuggled into this State from Jeypur and Singapur, and illicitly sold.

62. It should be cultivated only in selected places under proper rule and control.

63. The present system of vend is good, the ganja only being sold here and used, and the growth of the plant and illicit sale prohibited.

64. There is no other feasible way to its restriction but importing the hemp drugs under control of Government—not for any profit or gain, but for the good of the country, in preventing the widespread cultivation and limiting its consumption.

I have heard of failures in the poppy crops in Behar, Malwa, and other places. During the Franco-German War, there was no exportation of French liquors, and the large shops in Calcutta sold uncoloured brandy, a concoction of methylated spirits; but I have never heard of a famine in the hemp crops.

65. This I am unable to answer.

66. I should consider the three sorts of hemp drugs should be taxed separately in the same way as our spirits and wines.

68. None to my knowledge in this State. Those I have known in other places to exist are most baneful resorts, not only to the consumers themselves, who frequent the place, spend their earnings, and neglect their work and family, and tempt other people to the use of the drugs.

69. These shops are easily established by one of the consumers, and soon gains a gang of visitors. This I speak of former times. Public opinion

should be considered in permitting such shops, as well as those of opium and liquors.

70. I am informed that, from the adjoining States of Jeypur and Singapur smuggling of ganja takes place, and illicit sales are carried on by the people.

Oral evidence.

Question 1.—I have never had charge of a lunatic asylum. I have had no special experience of insanity at any time in my service. Ganja insanity has more delirium and violence than other forms of insanity. This is the case with dhatura also. I cannot diagnose ganja insanity from others, except that the former is more violent. I cannot distinguish it from dhatura insanity. In the cases I have given I diagnosed insanity from the history only, *i. e.*, from the information given by friends. I have had many cases of insanity. I have never had a case of insanity in a ganja smoker which I have not attributed to ganja. In every case where I had a ganja history, I attributed the insanity to ganja. I keep notes of my cases.

Question 23.—The word "bhang" is the usual name given to tobacco in Chhattisgarh. It does not denote hemp in any form.

Question 25.—Liquor is not dearer in Kalahandi than it was. I know of no reason for increase of the use except just the force of example, people picking up the habit from others. Ghasiyas and Doms did not use ganja when I came to Kalahandi. They have given up liquor for it to some extent. Liquor is a little dearer than it was then, and ganja is more portable.

Question 39.—Charas is worst, ganja next; then bhang is less harmful: not much less. I have never seen charas used in this province; but I have attended patients who took it in the North-Western Provinces. When I speak of "the drinkers" suffering from the stomach, I mean bhang drinkers. More than fifty per cent of bhang drinkers die of dysentery, or such diseases. Perhaps that is too strong a statement; but I have seen several die. I have noted in the case history whether the man took ganja or bhang. I am talking of Kalahandi State. Bhang is not used to excess as a rule; but those who use it are more subject to dysentery than others. Yet it is used for dysentery. I have found it useful in dysentery. That renders the patient inaccessible to usual remedies if he is a consumer. It is the same with opium. I think that liquor does not tend so much to dysentery.

Question 43.—Even the moderate users of the drug become petulant and quarrelsome.

Question 45.—Ganja is worse than bhang in its effects on the brain.

Case No. 1.—The man here is a Brahmin lad. He was doing carpenter's work for me when I wrote my answers. He is 20 years old. He learned ganja habit from the carpenter that taught him his trade. He had no liquor habit. The carpenter did not use dhatura, I believe. The fit of madness was while the lad was in my employ. It lasted a few days. He is not now mad. He is not now in my employ. He has since taken, I hear, to opium. He was only once mad. It was about three or four months ago. I know of no family history of madness or epilepsy. I stopped his ganja while he remained with me.

Case No. 2.—The zamindar in this case used ganja and madak together, mixing them in the

same pipe. I think madak and ganja together a most deleterious mixture, worse than either alone. Ganja alone is, I think, worse than madak alone.

Case No. 3.—In this case the patient died of delirium. His fever had slightly abated; and he took his drugs again and brought about delirium and died. One cannot distinguish between the delirium due to drugs and that due to fever. I do not know of any other member of that family that is insane except these two brothers (cases No. 2 and No. 3).

Case No. 4.—There was no hereditary taint in this case. No liquor or other vicious habit in this case. When I say he had fits of insanity, I mean fits of passion: the time when he attacked his sister was the first time he was insane. It was about three months after his last attack of violence. It was about fifteen years ago.

Case No. 5.—I attribute the cough in this case to ganja. Death was due to bursting a blood-vessel. This was caused by a fit of coughing, and the cough was due to ganja. I think that the vessel must have been a weak or dilated one, and that its weakness was due to ganja. I do not think that the use of tobacco would cause this. I think the drinking of bhang might cause aneurism or weakness of heart. I do not think liquor does. I have never diagnosed a case of aneurism in a bhang drinker. I base my view on the weakness of ganja smokers.

Case No. 6.—This man was not a drunkard. I ordered an emetic to remove all the contents of his stomach. I thought it was a case of dhatura poisoning. I found there was bhang, and the man told his story. I therefore made no examination for dhatura. I have seen dhatura used to strengthen toddy in this way. A chatti is inverted and dhatura burned under it. It is then turn-

ed right side up and the toddy poured in and shaken up. I do not know of this being done in this case to strengthen the bhang.

It is a common thing to mix madak and ganja in my part of the country. I have heard of aconite and arsenic being mixed, but not jowari root nor cobra saliva.

At the age of 19 years I was at one time at a nautch. I was offered sweetmeats. I took four lozenges. They contained majum. They produced happiness and exaltation. I laughed at every thing immoderately. When I got home I could not take off my studs. My mother suspected what was the matter and put me to bed. All night I felt a sensation as though I were being moved up and down. For three days I had a bad head. I wonder I did not become mad. I do not know of any thing else than hemp being in the majum.

Question 52.—The women become unvirtuous from want of means of livelihood. The same may be said of liquor, or of anything that tends to poverty.

Question 55.—The complete stupefaction produced by ganja alone is generally in the case of the first attempt to use the drug.

Question 56.—I have heard of this deception being still used on pilgrim routes. Bhang is used because people will take that. The poison is the dhatura.

Question 59.—If the license ticket were employed, I would prosecute people using the drug without a ticket. It would be difficult and expensive. I have no scheme to suggest. It is possible that such a system might be regarded as stamping the practice with Government approval.

Question 69.—I do not know of any case where remonstrance against a shop has been made.

39. Evidence of APOTHECARY J. PRENTIE, Civil Surgeon, Bhandara.

1. Twenty-two years' service. Residence in Punjab, Bengal, Madras, and Central Provinces. Observation of, and enquiry from, ganja smokers and bhang users in different parts of India.

2. The definitions are correct except that of late "chur ganja" has come to be spoken of and used as "bhanga" in these provinces, owing to some departmental rule by which bhang is destroyed.

10. No special class; ordinary agricultural cultivators.

18. Ganja deteriorates by keeping, quite losing effect in time. Keeps good with ordinary care about one year. Causes of deterioration—damp, exposure to air. No special measures required.

19. Generally used for smoking, but occasionally taken internally. Charas very rarely, by rich Marwaris and bairagis. Ganja is used throughout Central Provinces as "bhanga," for internal use—see reply to question 2.

20. Ganja widespread over Northern India, Bengal, and Central Provinces, used by all classes. Perhaps 25 per cent. of adult male population. Charas by rich men, particularly Marwaris.

21. Flat and "chur."

22. From Upper India.

23. True bhang not obtainable now; the term is becoming synonymous with "chur" ganja.

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24. All bairagis, fakirs and religious mendicants throughout India. In the Central Provinces 50 per cent. or more of adult male population occasionally, particularly in the hot weather.

(a) eating 5 per cent.

(b) drinking 45 per cent.

25. Generally held to be decreasing owing to rise in price, difficulties in purchasing, and increased facilities for obtaining drink, i.e., spirits.

26. Ganja—(a) 90 per cent.

(b) 10 per cent.

(c) and None,

(d)

Bhang, i.e., chur ganja, for internal use—(a) 100 per cent.

(b)

and None.

(c)

(d) Perhaps 50 per cent. of male Hindu population during "Holi."

27. Ganja—Religious mendicants, labourers, and the lowest classes, who are exposed to weather and undergo great hardships and prolonged toil at certain seasons.

Bhang—Upper and well-to-do middle classes, Government officials, shop-keepers, the largest

proportion of whom are Hindus. The beverage compounded is regarded much as Europeans look on light wines, claret or table beer—is taken for similar reasons and has like effects

28. Ganja—(a) 60 to 180 grains.

(b) 180 to 360 grains.

Bhang, *i.e.*, chur ganja, for internal use—(a) 90 to 180 grains.

(b) None.

29. Ganja—(a) tobacco invariably, (b) dhatura or opium very rarely, by religious mendicants.

Bhang—see definition *ante*—(a) sugar, black pepper, spices. (b) Perfumes, expensive spices, milk, almonds, sugar, *i.e.*, a posset, or pleasant highly spiced exhilarating drink.

No preparation kept for sale in Central Provinces: each consumer has a different formula.

30. Ganja—generally in company but by rich alone. Bhang, *i.e.*, chur ganja, for internal use, generally in company or in presence of others. Almost entirely confined to male sex and to adults.

31. Ganja. Habit formed in about two months; not very difficult to break off, except in the case of rich and idle. There is no great tendency to increase.

Bhang, *i.e.*, ganja internally. Easily formed; not difficult to break; no tendency to increase.

32. At "Holi" bhang is used by almost all classes of Hindus. The use is considered essential; is generally excessive; but does not lead to formation of habit or produce injurious effects. It is also used at male convivial meetings.

33. Ganja—Considered disreputable by rich and respectable people as practice is mainly confined to religious mendicants and low castes who toil for livelihood.

Bhang: ganja, internally—Taken by all classes at certain seasons. Considered a very wholesome and refreshing drink in hot weather. Not looked on as disreputable.

Not worshipped, but smokers of low castes make offerings of ganja to Mahadeo and "Mata Devi's" attendant sprite.

34. Would be a serious privation to labourers and others who undergo severe and prolonged toil at certain seasons, *i.e.*, rice transplanting and work during rains, long journeys on foot with insufficient clothing, poor food. Fishermen and others who lead outdoor, laborious lives, exposed to all weathers.

Perhaps 25 per cent. of adult males.

35. Quite impossible. The plant would be cultivated secretly all over India, and the constant prosecutions and espionage by police would be intolerable. It might thus possibly amount to a political danger. The prohibition would inevitably be followed by increased consumption of alcohol or other drugs, opium or dhatura.

36. Yes—see reply to question 25.

37. Intoxication produced by charas of longer duration and greater intensity.

38. Ganja and "chur" when smoked produce exactly similar effects.

39. I consider ganja smoking as far more injurious than bhang eating or drinking. In the former, acrid smoke containing nicotine from tobacco, carbon, and other products of combustion, is drawn directly into the lungs, setting up asthma, chronic bronchitis, emphysema, and eventually valvular incompetence. I have frequently found at *post-*

mortem examinations, the lungs of old ganja smokers so full of carbon as to resemble miners' lungs in England.

40. Bhang or chur ganja is used as an anodyne by native practitioners. It is also occasionally used in the treatment of cattle, to relieve colic spasms, etc.

41. Ganja and bhang only.

(a) Yes, both valuable.

(b) Yes, both valuable; ganja particularly.

(c) Ganja much used and considered beneficial.

(d) Both used during prevalence of cholera to some extent by nervous and timid people.

(a) and (b) Those exposed to weather at all seasons and toiling hard for a living, perhaps 75 per cent. of male adults. (c) and (d) All classes: numbers cannot be stated.

The moderate habitual or moderate occasional use is referred to above.

42. Though moderate ganja smoking is not in my opinion quite harmless, still its beneficial effects are certain for a long period, and on the whole I regard it as a lesser evil than spirit drinking or opium smoking. I have never observed any harmful effect from bhang drinking or eating.

43. Yes, quite inoffensive.

44. Ganja produces immediately a feeling of contentment, not amounting to actual intoxication: all sense of fatigue is lost, hunger is produced and a large meal of even badly cooked, insipid food is eaten and digested without trouble. The effect lasts an hour or more, and before it wears off, if it be after the day's work, the smoker is asleep and enjoys a sound and refreshing sleep. Another pipe is taken in the morning and the labourer is ready for another day's toil. The want of gratification does not produce any severe uneasiness or longing. The feeling of appetite and hunger is so marked that a plentiful supply of food is a necessity for a ganja smoker.

45. Ganja smoking only.

(a) None: it brightens the faculties, I am told.

(b) See reply to question 29.

(c) No; has the opposite effect.

(d) Dysentery, no; bronchitis and asthma, yes.

(e) Not laziness but possibly some tendency to immorality. Not more so than alcohol.

(f) The habitual, moderate use has no such effect.

(g) No such cases are known to me, but I have seen young lads who contracted the habit about the age of puberty and who afterwards became insane. Deficient self-control may have been hereditary or produced by excess in other directions.

46. The habitual, excessive use of any of these drugs would necessarily prove harmful and, in my opinion, would be more productive of insanity than other forms of intoxication. The insanity produced was dementia with timidity, at first temporary, I believe.

47 and 48. No.

49. Not largely used as an aphrodisiac, for which purpose it is considered weaker than liquor or opium. Prostitutes appear to use it, not as an aphrodisiac, but as an alleviator of muscular fatigue, and to give them endurance at special times. I have never heard that the moderate use of hemp caused impotence.

50. Not used as an aphrodisiac. Not used by prostitutes. Said not to cause impotence.

51. No. The only connection would seem to be that the poorer classes use ganja largely, and these furnish the larger proportion of offenders in all countries.

52. Uncertain.

53. No.

54. No exact information, but it is possible. Criminals under sentence of death, who had run "amuck," have told me that they were addicted to ganja, nux vomica and other drugs; that the same had been secretly administered to them; but I could place no reliance on their statements as they were evidently seeking commutation of sentence.

55. Complete stupefaction cannot be produced by hemp alone. The admixture of dhatura is sometimes practised for this purpose.

56 and 57. No information.

Oral evidence.

Question 1.—I studied in Calcutta up to the Apothecaries examination. I have never been in charge of a lunatic asylum. I have been Civil Surgeon for five years. I have frequently made casual enquiries about the hemp drugs, and paid more attention to the subject since receiving the communication in question. I have enquired of old ganja smokers in jails. I have frequently questioned bairagis on the road and at the dispensaries.

Question 2.—Of late years the stalks and coarser leaves are destroyed by Government orders. I was not aware that bhang was imported from the North-Western Provinces.

Question 29 (b).—My information about mixture of dhatura is derived from enquiry. One bairagi, and only one, told me he had used it, and given it up because its intoxication was too intense. He did not volunteer the information. The information about mixture of opium is of the same kind, derived by enquiry. The above bairagi did not, he said, experience complete intoxication from ganja alone. He lives at Bhandara still.

Question 35.—Liquor is comparatively expensive in Bhandara. If ganja were prohibited, the ganja smoker, who could afford it, would take to opium, the next cheaper, and then to liquor. The liquor habit is considered more disreputable than the opium habit. I think the resort to opium smoking would be more hurtful physically. The resort to alcohol drinking or opium eating would not be more hurtful, because the classes who smoke ganja could not afford much of the other intoxicants. I think prohibition might encourage consumption of dhatura on account of its greater powers and its cheapness; but I know of no cases of ganja smokers having taken to the habitual consumption of dhatura. I know of no case in which the ganja habit has been relinquished for the opium habit.

Question 39.—Every ganja smoker I have spoken to has had some affection of the lungs or bronchial tubes. A special effect is due to the effort of strong inspiration. The affection here referred to is emphysema. The second sentence of my answer would be true of tobacco also, if it was constantly smoked in the same way as ganja is. The third sentence would, under the same conditions, be true of tobacco. I am of opinion that a very large proportion of the poorer class of tobacco smokers who attend dispensaries mix ganja with

their tobacco. Congestion of the eyes is frequently noticed, and, I regard that as symptomatic of ganja smoking. It was only since receiving the Commission's questions that I came to regard the deposit of carbon in the lungs as the effect of ganja smoking. The presence of carbon in the lungs is a diagnostic mark of smoke having been drawn into the lungs.

Question 41.—In regard to the first part of my answer, I made full enquiries before arriving at the opinion that ganja was digestive as well as bhang.

Question 42. I mean that the beneficial effects of ganja may endure through a very long period of indulgence in the habit. I know men in Bhandara who admit having been smokers for 30 or 40 years. The lung troubles are the only harmful effects I know from the moderate use.

Question 44.—The reason why I consider a ganja smoker requires a plentiful supply of food is that ganja smoking is a great provoker of appetite, not that he requires food to resist the evil effects of the drug. I do not consider that it can be said to allay hunger.

Question 45.—The cases to which I refer at the close of my answer were cases in which the youths had probably contracted the excessive habit and were addicted to other vices, besides being of weak physique. One was admitted to the Nagpur Asylum from the Bhandara Jail about 1889. The other was a Punjab case. The vices, especially sexual excess, might produce insanity without the stimulus of ganja. There were no special symptoms which led me to suppose that ganja had been used.

Question 46.—The congestion of the eyes and the speedy intoxicating effect of ganja lead me to suppose that the drug must affect the brain more markedly than other intoxicants do. Intoxication supervenes on indulgence in ganja much more rapidly than on drinking of liquor. Congestion of the conjunctiva is not necessarily connected with congestion of the brain; but in the cases of ganja smoking in which I have observed this symptom, I believe in the connection, because I could ascertain no other cause. Congestion of the brain does not always produce congestion of the conjunctiva. The congestion of the conjunctiva appeared to me in observed cases to be permanent, and I should expect that a corresponding permanent congestion of the brain existed. Congestion of the conjunctiva is found in cases of alcohol poisoning; and in those cases there is corresponding congestion of the brain, leading afterwards to other degenerating changes. I should think it probable that similar degeneration took place in the brain of the ganja smoker. I have never noticed in *post mortem* examinations any brain changes due to ganja, because the point was not in my mind at the time. I have not followed up cases of ganja insanity. One symptom is timidity. When permanent changes in the brain have occurred, there can be no cure. The two cases mentioned under question 45 are those on which I base the description of ganja insanity given in question 46.

Question 49.—On the subject of ganja as an aphrodisiac, I made enquiries from a large number of ganja smokers, and particularly from one man in the Bhandara Jail, who was connected with prostitutes. My conclusion is that ganja may have a slight effect, that bhang and its preparations have none.

Question 50.—I do not believe that bairagis and fakirs take the drugs to allay their passions, but the reverse.

Question 54—I remember two cases, one in 1889 and one in 1890 or 1891. The men were executed.

Question 55.—My opinion is based on enquiries, and I refer only to ganja smoking. Bhang, they

say, is never taken to such excess as to produce stupefaction, and that it would not be possible to rob a person while he was under the intoxication of bhang or ganja.

40. Evidence of APOTHECARY GEORGE MURPHY, Civil Surgeon, Mandla.

1. I am Superintendent of the local jail and have held charge of the Native Lunatic Asylum, Calcutta. I have also had numerous interviews with consumers of the drugs.

2. Dr. Prain's definitions obtain throughout the district. Charas is known as the resinous extract. Its use is confined to a very few individuals in the town, and it is not retailed by vendors. Bhang is the dried leaves and a few capsules without stalks. Ganja is dried flowering tops together with the smaller leaves of the hemp, generally flatly compressed, but also met with in bundles. Chur is the semi-powdered, crushed waste which accumulates in retailing both bhang and ganja.

19. Ganja is used only for smoking. But occasionally the crushed waste (chur) is employed in preparing a drink similar to the bhang draught. This, however, is only done when bhang is not procurable and is pronounced very injurious by old bhang drinkers, from the resulting potent intoxication.

23. Bhang is not used to smoke, as it is too mild in effect.

28. Ganja—(a) $\frac{1}{8}$ to 1 tola—cost 3 pies to 2 annas, (b) 1 to 3 tolas—cost 2 to 6 annas. (The last quantity—3 tolas—is used by exceptionally excessive consumers). Bhang—(a) $\frac{1}{8}$ to 2 tolas—cost 3 pies to 1½ annas, (b) 2 to 4 tolas—cost 1½ to 2½ annas.

29. With ganja, tobacco only is used in very small quantities.

With bhang—(a) almonds; melon and cucumber seeds; black pepper; cardamom, dill, aniseed and other spices; sugar; gür; (b) dhatura and opium in addition to above ingredients. These drugs are mentioned by fakirs and vendors as being sometimes used to increase intoxication; but no case has been examined who indulged in these admixtures. "Bhang massalas" are not prepared for sale here.

30. Ganja smoking is generally carried out in company. Very moderate, habitual smokers occasionally consume the drug in private to prevent their weakness from being publicly known. Bhang draughts are prepared laboriously, hence its consumption is more usually accomplished in private, or amongst family members. Both habits are confined to males, women and children not being allowed to partake. Boys working with boatmen, or in coolie gangs, are sometimes included in ganja smoking bouts and become habituals.

31. The ganja habit is easily acquired but most difficult to give up. The tendency is to regular consumption, two or three times a day. The ordinary labourer, or artisan, seldom exceeds a fixed moderation; but fakirs rapidly attain to excess.

32. The strolling fakir (bairagi; prikamba-bashi) acquires excess in ganja and bhang under the impression that it enables him to repress sexual desire, overcome fatigue and narrow his ideas within religious limits. This result is only to be attained by constant and excessive indulgence.

During "Holi" the ganja chillum, bhang draughts and majum are partaken of to remove fatigue and create enthusiasm in the singing and

posturing processions. But these drugs are only used by the lowest castes and as an adjunct to the alcoholic liquors freely imbibed.

The use of the drug is not essential to any religious or secular ceremony; but habitual consumers often date their habit to such periods.

36. The substitution of alcohol for hemp drugs is not appreciable. Cheapness, rapidity of effect, and the surface warmth induced by ganja smoking make it a special boon to Dhimals, Kachis, Koles and other low castes who are much exposed to climatic influences. They state that ganja enables them to work, while alcohol or opium can only induce enervation and sleep.

37. Ganja smoking differs from bhang drinking in the quicker and more active intoxication produced and in the invariable mental confusion that occurs. The moderate bhang draught permits of clerical and mercantile work, subsequently; whereas ganja inhalation produces immediate intellectual aberration, which lasts till the fumes have dissipated.

40. Bhang and charas are occasionally prescribed by local "baidis" in very small doses for their stimulating, tonic effect, and also as antispasmodics in colic and asthma.

41. Ganja and bhang are both used as digestives. Ganja is often smoked to allay hunger during long journeys and to counteract the effects of intense cold and fatigue. Neither is used for febrifuge effect.

42. The moderate use of ganja and bhang is practically harmless. Most of the very poor, who are constantly subjected to excessive exertion, insufficient food, and exposure to cold and damp, partake of the drugs from early youth to old age without developing any evil symptoms. Moderate consumers of the better classes also show no signs of bodily nor mental decay.

44. Ganja induces exhilaration, banishes fatigue, and causes a variable amount of intoxication which lasts from 2 to 4 hours. There is dryness of mouth and a tingling of the body surface, very marked in the early stages of the habit. It allays hunger, but does not prevent the consumer from enjoying the usual meal. The appetite is not stimulated.

Bhang gradually produces a pleasant sense of refreshment and bodily ease, with an inclination to happy thoughts. This goes on to intoxication and culminates in sleep. It is usually taken after food and does not injure digestion. The effects last from 3 to 5 or more hours.

The habitual use of both drugs produces an appreciable amount of languor and a desire to repeat the indulgence; but these sensations are easily controlled.

45. The moderate use of ganja and bhang does not ordinarily produce any noxious effects. Ganja sometimes causes a thickening of the mucous lining of the throat and larynx producing chronic catarrh. The constant mental enervation, consequent on ganja inhalation even in moderate doses, does not seem to induce further aberration, or culminate in laziness and immoral habits.

46. The habitual, excessive use of ganja generally produces lasting physical injury, mental confusion and moral deterioration. Loss of flesh and even emaciation frequently occur from disinclination for food and dyspepsia. A chronic bronchiectasis is always present, simulating asthma.

Inertia, due to mental depression and general physical languor, exists; but there is usually a complete absence of sexual desire.

The intellect is permanently impaired, and insanity sometimes produced.

Two cases recently came under observation where acute dementia resulted from ganja excess, and, in both, the drug was the predisposing cause. Young and strong, with no history of family trouble or sickness, these police constables developed insanity after prolonged excess in ganja smoking.

The prominent symptoms were despondency, incoherence, moroseness with occasional maniacal paroxysms, and a profound aversion to movement or activity of any kind. Both recovered under treatment, but a temporary relapse followed renewed indulgence in one case. This man's second attack resembled a subacute melancholia without any very violent fits of mania.

47. Heredity cannot be traced in any single case.

48. Facility in obtaining the drug is quoted by a few habituals. A habitually drunken father leaves the drug lying about and the son thus contracts the habit at a tender age. Heredity cannot however be made out.

49. Occasional moderate use of ganja and bhang is practised for aphrodisiac purposes and does not result in any injury. Moderate habitual use of both is said to produce impotency, but no facts bearing on the point have been elicited.

50. Excessive use of ganja and bhang produce impotence and often complete inability for sexual intercourse. This is stated by many fakirs and a few laymen, but all of an advanced age, well past the prime of life.

Oral evidence.

Question 1.—I am Apothecary. I passed the examination of the Calcutta Medical College in 1872. I was Deputy Superintendent of the Native Asylum at Dullanda (Calcutta).

Question 29.—Tobacco is only used in small quantities, *i.e.*, about equal quantities of tobacco and ganja. It is used to "dilute" the ganja. I have never heard of other admixtures with ganja. People say, for example, that dhatura is mixed by others with bhang; but I have never come across a case of a man who himself admitted the use of dhatura in bhang. I have never heard of it in ganja.

Question 32.—This statement about the use of hemp drugs at the Holi refers to the Mandla district. There the higher classes do not use bhang to any extent. It is there only the lower classes, who cannot afford enough of alcohol, who use these drugs, especially ganja, to supplement the alcohol. It is only the minority of the lower classes who thus use both. Others are content with alcohol.

Question 37.—The use of ganja, even moderately, invariably produces mental aberration. It unfits for mental labour but not for physical labour. And it is harmless to the constitution. I have seen much ganja smoking among the lower orders. I have seen it practised often. The smoker has a

great throbbing of the head, and there is a want of power of concentration and attention. I think the fakirs use it to produce abstraction, the non-attention to all other matters.

Question 45.—I do not find that this constant mental enervation tends to permanent evil in the case of the moderate smoker, though such cases occur among excessive smokers. This "aberration" seems connected with temporary congestion of brain; and ordinarily one would expect that its frequent recurrence would lead to permanent mischief; but experience is against this. I do not think that the moderate indulgence leads to laziness or immoral habit. No doubt the habitual use creates a desire to repeat the indulgence; but smokers tell me there is no difficulty in controlling any desire to indulge at odd times. It is easy to keep to the regular times fixed.

Question 46.—The two cases I refer to came under my own observation. Neither has been in the asylum. Sheoparsad was one of them—a Purbia, a Police constable. He became insane at Gugari and was sent to me by the Deputy Commissioner to be kept under observation in the jail. He had smoked ganja and drunk bhang to excess with a fakir at Gugari. I inquired about admixtures, and was told that there was no dhatura or other poisonous drug used. The brother told me that there was no family history of insanity. The man was insane when he came to me. He was sent in twenty-four miles and was in Mandla for a few days. I probably saw him a week after the excess. He was morose and irrelevant, and was inclined to beat people. I wanted to send him to the asylum; but his brother took him to the North-West. He returned a year after and seemed still wild of appearance. He hung about the ganja shop and assaulted a public servant, and was sent to jail for six months and a year more in default of security. I did not think him insane, and therefore he was convicted. There was no insanity, but a tendency to irritability and temper, and a wildness of eye. On the first occasion (a year before) he was insane, suffering from dementia. The "relapse" I refer to in the fifth paragraph is the wild appearance and violence described above as leading to his imprisonment for assaulting a public servant. This man is now in the Central Jail at Jabbalpur. He had been a man of good character; and had been only three months at Gugari. There was nothing else than ganja to which I could attribute his insanity.

The other case was a Head Constable. I forget his name. He said he had family trouble; but I believe that was a hallucination. He took to ganja privately. He refused to work and asked for leave. It was refused, as I could not find any illness. He tore up some papers in the office. He was sent to me for observation in the jail. He was in the jail for three days. The family took him away; but he came with his friends regularly to the dispensary. He was insane. He had been kept from ganja for two weeks before the outbreak. Therefore it was not intoxication. This man is now sane and at work as Head Constable.

I have seen many ganja cases in my asylum practice. I cannot say that these two cases are typical cases. I had more complete history in these cases than we used to have in the asylum. There are no such typical symptoms of ganja insanity as to justify its diagnosis apart from case history. I have never seen any cases of insanity from dhatura. I have seen cases of dhatura poisoning. I cannot say whether the symptoms bear any resemblance to ganja cases.

41. *Evidence of DOORGA DAS SEN, Baidya, Assistant Surgeon, Warora.*

1. The following informations have been obtained from actual observations and enquiries among the workers employed at this colliery, as well as from my general experience as a medical man.

19. Ganja, I believe, is exclusively used for smoking.

20. As a rule, the low caste people smoke ganja; about 15 per cent., I understand, of the workers of this colliery are used to it. Charas is not used at this place.

21. The 'flat' and the 'chur' or broken ganja are generally used by the people; the former being comparatively dearer, is used by those who can afford to get it, and the latter by the more poor classes. The other variety, viz., the 'round ganja,' is seldom or never used by the people of these provinces.

23. Bhang is never used for smoking here.

24. Bhang is largely used chiefly by the upper classes of the Hindu people and generally they drink it in the hot weather, mixed with some mas-salas or with milk and sugar, with an impression that it has a cooling and refreshing effect on the body and the mind. Some, however, especially of the poorer classes, would either habitually or occasionally eat this drug. They mix up the broken leaves of bhang with treacle into a pulpy mass and divide it into balls which they call "gur bhang," and eat them daily as often as they would.

26. Ganja—(a) 10 per cent. of labourers.

(b) 5 " "

(c) Nil.

(d) Nil.

Bhang—(a) Nil.

(b) Nil.

(c) about 10 per cent.

(d) " 5 "

27. As stated above, bhang is chiefly used by the upper classes of the Hindu labourers, viz., Brahmins, Kshatria, etc., etc.; ganja by the low caste people, such as Chamars, Koris, Passees, etc., and some among the Mubammadans. People take to the habit of smoking ganja and drinking bhang with an idea that the said drugs have a peculiar effect in giving tone to their muscles and nerves, making them more active and energetic and better fitted for hard and risky labour. It is an established fact that persons addicted to such habits easily convert others, among whom they live and work, to the same habit; explaining to them the desired effects, real or imaginary, of the drugs; and thus we see that the practice of ganja smoking and bhang drinking is prevalent to so large an extent among the labourers of this, as, I believe, of other collieries in India.

	Average allowance per diem.	Average cost per diem.
28. Ganja—(a)	$\frac{1}{2}$ tola	7½ pies.
(b)	1 "	1 anna 3 pies.

29. Tobacco is mixed invariably, and dhatura occasionally, with the ganja; the former to moderate, and the latter to increase its narcotic effects. Massala, such as black pepper, seeds of cucumber, cardamom seeds, dried rose leaves, sweet almonds, etc., are generally mixed with bhang; sometimes sugar and milk instead. Dhatura is never mixed with it, except in some rare cases, when it is recorded to have been used with criminal intent.

30. Ganja and bhang are, I believe, as much used in solitude as in company. Their use is exclusively confined to the male sex. It is unusual for children to consume these drugs.

31. Yes, the habit is easily formed, and once formed it is difficult to break off. This remark applies more strongly to ganja smoking than to bhang drinking. The wretched smoker would rather forego a meal than the "chillum" of his ganja. There is not necessarily a tendency for the moderate habit to develop into the excessive, either in case of ganja smoking or bhang drinking.

32. I do not know of any other custom, social or religious, in regard to the consumption of these drugs than that a large proportion of the Hindus would drink a cup of bhang during the Holi festival, even those who had not touched it on any other occasion. Some would drink during the time to an excess; but this is not likely to lead to the formation of habit, or is otherwise permanently injurious.

33. The habitual ganja smoking is certainly regarded by the general public as a moral weakness, even a vice; and the reason is obvious, for the poor smoker is degraded in the eyes of the public and is looked down as a fallen creature, who is never to be believed or trusted: such, however, is not the case with bhang drinking, habitual or occasional. There is no custom of worshipping the hemp plant on any occasion that I know of.

34. However serious the privation would be to any class of consumers to forego the consumption of the drugs for a certain number of days, the effect is only temporary, for instances have often been observed in jails, where a convict, who had been a hard smoker, has, as a matter of course, left off the habit during his sojourn in the jail, with perfect impunity, except for the first few days, when he was rather out of sorts.

38. The action of the two varieties of ganja, viz., the 'flat' and the 'chur,' differs more in degree than in kind; the former is superior to the latter.

I do not think there is any real difference in effect between smoking, eating, and drinking any of these drugs.

40. Never to my knowledge.

41. Some good effects are attributed to the use of these drugs, such as have been given in reply to query 27.

42. I do not think that even the moderate use of these drugs is harmless, far less that it is beneficial in any way. For even the moderate use would, in time, produce almost the same remote effects as a more free use of them.

43. Yes, generally they are inoffensive.

44. The immediate effect seems to be refreshing; it does not in a moderate habitual consumer produce actual intoxication, but rather exhilaration. It allays hunger to some extent and creates appetite in case of bhang drinking. The effects are temporary and would last for a few hours only. The after-effects are undoubtedly bad, such as gradual loss of muscular and nervous tone, depravity of moral character, inducing the victim to cowardice and crime; some would go insane, others confirmed imbeciles. Diseases, such as bronchitis, asthma, functional derangement of the heart, diarrhoea, dysentery, and the like come on in advanced years and prove very obstinate.

45. Yes, it produces injurious effects, physically, mentally and morally. It impairs general health, and predisposes its victims to subsequent bodily and mental diseases. It causes diarrhoea, dysentery, bronchitis and asthma in after life. It impairs the moral sense and induces laziness and immoral habits. It generally deadens the intellect, as a remote action, and in rare cases produces insanity, which is generally temporary, the typical symptoms being a playful mirth, inducing the victim to fits of laughter. He would frequently play with imaginary objects. And in those rare cases the use of hemp is *de facto* the only or one of the principal predisposing causes.

46. The above remarks apply more strongly in case of habitual excessive use of the drug.

47. Neither.

48. The same as above.

49. Yes, it is indeed often used as an aphrodisiac. I do not know whether it is used by prostitutes. I do not think that the use for this purpose is more injurious than its use as an ordinary narcotic. The long continued use of hemp has almost a sure tendency to produce impotence, as an after-effect.

50. There is no material difference.

53. It is very likely that excessive indulgence in ganja would incite to unpremeditated crime, violent or otherwise, and though I do not actually know of any case in which it has led to homicidal frenzy, I consider it quite possible.

55. There are some recorded cases where criminals did induce their victims to partake of bhang, mixed with dhatura, with a view to stupefy them. I do not know of any case where complete stupefaction has been induced by this drug without admixture.

56. Bhang, when freely mixed with dhatura, is a very strong narcotic. Cases are on record where the mixed drugs have been administered to others with criminal intent, chiefly with the object of robbing the victims. Dhatura is seldom or never mixed with bhang for personal consumption.

Oral evidence.

Question 1.—I was educated in the Calcutta Medical College. I am L. M. S. I have served twenty-two years. I was in Bengal for some years, and in the Central Provinces for some years. I have been in charge of the Damoh and Mandla Jails for some time. I began to record information on this subject about a month ago. Before that I had paid no special attention to the subject. I had kept no notes.

Questions 27 and 41.—The "idea" referred to in the second sentence is to some extent correct.

People are to some extent better fitted for hard labour. I do not myself think that ganja is a food accessory. I think it tends to injure digestion. I think bhang may be a digestive; but that is due to the carminatives, etc., in it. I think these drugs are staying in hard labour. I cannot say whether they are febrifuge. The person accustomed to ganja will not be able to do his hard and risky work without his ganja; but I do not advise any man to take ganja so as to have more staying-power. I cannot say either that smokers are better workers than non-smokers or the reverse.

Question 29.—My information regarding the criminal administration of dhatura is derived from books.

Question 39.—I do not think there is any real difference in effect between ganja and bhang; but there is difference in degree. I think that ganja smoking is more harmful than bhang-drinking. That is my experience.

Question 45.—The "remote" or after-effects to which I refer in question 42 are such diseases as asthma, bronchitis, diarrhoea, functional diseases of the heart, etc. I think these may result from the moderate use of the drugs. The result is cumulative. This does not apply to insanity which results only from the excessive use. In regard to asthma, bronchitis, diarrhoea, and dysentery, I think the moderate use is enough to cause them. I have seen no case of insanity from moderate use; but I know cases from excessive use. I remember a case in my own village in Bengal of a man who used the drug (ganja for smoking) and became insane. He was cured in some four or five months. He resumed his habits on release and was back in the asylum in six months. I have not heard of his release. I have seen him smoke ganja regularly. I cannot say whether he took dhatura. He was a hard ganja smoker. He therefore possibly took dhatura, for hard smokers mix dhatura to increase the effect occasionally. This is the only case of insanity that I personally know from hemp drugs. The man was a neighbour. I know of no member of his family being insane. I do not know of his having epilepsy. He was forty-six years old when first insane.

I do not think that the moderate use of bhang would cause asthma or bronchitis or diarrhoea or dysentery. It is ganja that causes these remote effects. Bhang is, I think, harmless as regard its remote effects.

The last sentence of my reply to question 41 is based on the case above narrated. My remarks about the typical symptoms are based on what I have heard.

42. Evidence of MUHAMMAD HABIBULLA, 1st grade Hospital Assistant, Seoni.

1. My experience of 14 years' hospital practice and during six months as Deputy Superintendent, Lunatic Asylum, Jabalpur, I had numerous opportunities of investigating its relation to insanity.

2. Yes; I accept unreservedly these definitions by which the various narcotic articles are known and recognised in these provinces.

3. I know personally no district where the hemp plant grows spontaneously, but this I know that if ganja smokers throw any of the seeds about, they take root and grow almost in any ground, though owing to prohibition of cultivation such accidental plants are at once cut down.

4. The plant is known as the ganja plant, also

wijia, also *phul ganja*, ganja flower. These three names refer to exactly the same plant.

5. I have no personal knowledge on this matter.

6. I have heard some residents of Sind and Kashmir say that the growth of wild hemp is dense ordinarily.

7. In Nimar much is cultivated, *viz.* :—

(a) chiefly for ganja (flat),

(b) not for charas,

(c) not for bhang,

(d) not for fibre or seeds,

though it is possible (b), (c), (d), may be utilized to a minor extent.

8. I cannot speak with personal knowledge on this subject.

9. While I was at Khandwa I had occasion to see cultivation of ganja; the cultivators at first prepare soil which is of a friable nature and well manured, and exposed to sun. In May or June the ganja seed is sown; after the plant attains sufficient height, *i.e.*, after three or four months, it is trimmed of its scattered lower twigs so that it may flourish. About this stage the *parakdar* recognizes the female and male plants and destroys the latter, reserving a sufficient stock for seed for the next crop; the flowering tops of the female plant are now trimmed and being pressed with hands are brought into round shape.

It matures about January, and by the month of February it is capable of being gathered. The cultivators then reap it and dry it in shade and sell or consume.

The seed of bhang varies from that of ganja, but the resemblance of each other is so alike that they are hardly distinguished from each other, but their plants are distinguished when they attain a height of one foot or more.

Two kinds of ganja are cultivated and used in these provinces: (1) *pattar*, (2) *biltuchur*.

10. No. They are the ordinary agricultural cultivator class.

11. I cannot say, but it is probable that the seed of wild hemp can be cultivated for production of ganja.

12. I can't say.

13. Yes; except in Nimar ganja cultivation is strictly prohibited.

Nimar was probably selected because there ganja grows well and its cultivation is well understood by the people, who learnt it from their neighbours in Indore, and for reason that the land of that district is well suited for its cultivation on account of its being of light character.

14. In Nimar only—

(a) Ganja is the only product prepared to any extent.

(b) and (c) Charas and bhang may be prepared to a slight extent.

15. I can't say.

16. Yes; in their houses or neighbourhood bhang can be prepared from the hemp plant wherever grown. Ganja and charas can also quite possibly be prepared from wild ganja wherever grown.

17. No special class of people can be said to be preparers of hemp drug.

18. Yes; all three deteriorate by keeping; and in time all will become inert. With careful keeping in tât bags the three drugs will keep good three years. The causes of the deterioration are that the volatile active principles evaporate. By keeping in any dry closely covered receptacle deterioration may be prevented for three years or more, but beyond three years the power of the drug will be diminished.

19. Ganja and charas are practically only used for smoking.

Ganja is occasionally eaten under the following circumstances, *viz.*, when bhang being scarce "majum," a confection, is made from ganja instead of from bhang as it should be. This is rare, however.

20. No hard-and-fast rule can be laid down as to any special class smoking ganja and charas, but

the lower castes probably smoke more than the higher castes; especially do the sadhus and bairagis (Hindu beggars) and labouring classes indulge in ganja smoking. Some 3 to 5 per cent. of the whole population of this district smoke ganja.

21. In these parts flat ganja only is obtainable and hence is used.

22. Native charas. I do not know of any importation of the foreign article, but I hear some say that *kabulis* import charas, but it is doubtful whether they are authorized to do so within British territories.

23. No.

24. Marwaris and Purbiyas use bhang (a) in the form of sherbet to drink, and (b) in the form of "majum" confection to eat. Some 2 to 4 per cent. of the whole population of this district do this.

25. On the increase certainly as regards ganja consumption, but to a very slight extent.

26. Out of 100 ganja smokers (who form some 3 to 5 per cent. of the whole population)—

(a) 30 will be habitual moderate consumers;

(b) 20 will be habitual excessive consumers;

(c) 40 occasional moderate consumers;

(d) 10 occasional excessive consumers.

The same proportion as above is applicable to bhang consumers. As for charas I can't give any definite proportion because charas is rarely procurable.

27. Labourers, such as Dhimars and Gonds, etc., doing hard work, chiefly form class (a). Sadhus and bairagis (Hindu beggars) mainly form class (b). All classes form class (c).

Class (d) is formed chiefly by recruits from class (a), who occasionally exceed their habitual moderate allowance.

28. (a) Half a tola, price anna 1.

(b) One tola and over, price annas 2 and upwards. Some men will smoke 3 tolas daily.

29. Exceptionally excessive consumers mix dhatura with ganja to increase the intoxication. Nux vomica is sometimes added as an aphrodisiac and opium to increase intoxication, but general ingredient of ganja is tobacco. Bhang massala consisting of cardamoms, black pepper, rose petals, saffron, cloves, cummin, etc., is made and sold for this purpose.

30. Bhang is chiefly consumed as sherbet in company. Ganja alone or in company is smoked. Yes, chiefly confined to male sex. Children do not consume any of these drugs.

31. Yes; habit is easily formed. No; there is not the craving that the opium eaters experience, so the habit can be broken. The excessive consumer always begins as a moderate consumer, so there is of course a tendency for the former habit to follow the latter.

32. Hindus consider the hemp plant sacred and offer it to their gods. After the Durga Puja it is their custom to distribute bhang among the crowd. It is considered an essential part of such ceremonies, and the use is moderate, and does not lead to the formation of the habit.

33. Bhang and ganja consumers are looked on by Hindus and Musalmans alike as somewhat loose and untrustworthy, and a respectable man would not give his daughter in marriage to such a man. In connexion with religious rites and very occasional consumption, a bhang or ganja consumer is

not in any way socially looked down on. Among Muhammadans, of course, if a man is in the habit, or ever uses intoxicating drugs, and it becomes known, he is socially and religiously outcasted; but this is generally the case among Muhammadans of lower sects, such as Pinjaras, Kunjras, and the like.

34. Sudden deprivation of the drug would be a serious privation to habitual consumers, but any one could gradually break himself off the habit.

35. Feasible by prohibiting cultivation of the hemp plant, which would to a small extent be illicitly consumed. Of course, discontent would be occasioned among consumers, but not to the extent of a political danger. The prohibition can possibly be effected by (a) raising the price, (b) reducing the number of retail vendors, (c) the quantity now legally allowed to each consumer may be reduced, as may appear, feasibly to half. It is possible that the drug may be substituted for alcoholic stimulants or some other drugs.

36. One addicted to this drug can substitute alcohol for it, provided (a) not prohibited by religion or caste; (b) the consumer cannot at once put a stop to this habit, hence he must have some sort of stimulants. This chiefly occurs among low castes, as both the stimulants possess the same sort of intoxication.

37. Ganja and charas smoking are alike in their effects, but the latter is to a certain degree stronger than the former.

38. The different preparations referred to have not different effects on consumers, but "chur" or broken ganja is considered to be more powerful than the other two in its effect, because it contains more resinous part.

39. The smoking of any of these preparations is, of course, more injurious form of consumption than eating and drinking, for the drug is composed of cannabine, which is not diluted in smoking, and hence it vigorously injures the system.

40. Ganja is generally used by native quacks as an electuary or confection for aphrodisiac effects in impotency, spermatorrhœa, incontinence of urine or for piles or neuralgic pains, or eye sores, etc., to allay pain. It is also used in two forms of pharmacopœic preparations, viz., tincture *cannabis* and extract *cannabis* for antispasmodic, anodyne, hypnotic, aphrodisiac and uteromotor properties in several forms of diseases in dispensaries.

41. (a) It increases appetite in intoxication, but ultimately it creates constipation, and all secretions and excretions except liver diminish.

(b) Yes; it considerably alleviates fatigue.

(c) In malarious and unhealthy tracts the use of these drugs is, I believe, of no use, for I remember to have treated most of the habitual consumers suffering from malarious attacks, as it has no antiperiodic property.

The labouring classes for the most part form the number of consumers to a greater proportion, but those who take it to alleviate fatigue or to prevent malarious attacks are the habitual moderate consumers.

42. Of course the moderate use of any of these drugs is injurious, because the moderate use paves the way for excessive habitual use.

43. The moderate consumers cannot be said to be absolutely inoffensive to their neighbours, because they acquire peevish nature even by the moderate use.

44. It at first excites the circulation whether the consumer be a habitual consumer or occasional. Of course it can be called refreshing at the very outset of excitement, then it is followed by boisterous delirium, pleasant and surprising confusion, distorted ideas terminating in catalepsy and sleep, whose effects last for a couple of hours. It certainly increases appetite during intoxication.

After the effects disappear there are no symptoms of uneasiness, etc., except constipation. Like opium it does not leave headache, restlessness, nausea and sleeplessness.

45. Undoubtedly the consumer becomes gradually emaciated, dull and unable to bear the sun and is consequently exposed to variety of diseases, such as lung diseases, dropsy, and anasarca, etc.; the consumer becomes peevish, dull of intellect and memory, and loses mental faculties, and adheres to immoral character and habit, because he likes the society of bad characters and indulges in luxury. The ultimate result of all these is insanity, either acute or chronic, permanent or temporary. If a consumer leaves it after a long use and takes it again, he is likely to be affected by temporary insanity; contrary to this, if a man use the drugs continually for a long period without restraint, he is sure to be affected by permanent insanity.

Typical symptoms of acute mania or insanity are:—The passion, the intellect and emotion are all affected. It is generally preceded by a period of incubation which may vary from a few days to some years; and when it is fully developed, the patient exhibits paroxysmal violence both against himself or others. He cannot fix his mind to any work, and becomes of highly irritable temper. He will tear his clothes, and drink or eat voraciously, or hate food altogether. He undergoes an amount of muscular exertion without sleep, apparently without fatigue. His face becomes flushed, eyes wild and sparkling, and complains of ringing in the ears, pain, weight and giddiness in the head. Illusion, delusion, hallucination, monomania, kleptomania (propensity to theft), dipsomania (craving for drink), satyriasis (excessive sexual desire), homicidal or suicidal melancholia. Some of the above mentioned symptoms appear singly and sometimes conjointly. Yes; some of the insanes who have no recorded history very rarely confess use of the drug.

46. Habitual moderate consumers become ultimately habitual excessive consumers, and hence the result becomes much the same as given in reply to question No. 45.

47. It does not appear to be a hereditary habit. The moderate use can affect the children of the consumers in case he gets insanity.

48. Same thing as above.

49. Yes; its moderate use is practised as an aphrodisiac. As far as I know, it is never used so by prostitutes. There may be very rare cases, say, about 10 per mille. In reality the use of the drug as an aphrodisiac is more injurious than as an ordinary narcotic. The grounds in support are:—(a) It generally lessens secretions, and so it may have the like effect on seminal fluid. (b) When the seminal fluid is less secreted, it is possible that the sexual excitement may more or less be affected. The excitement, I think, is directly proportional to the secretion of the seminal fluid. (c) Ultimately the man is likely to become impotent.

50. See reply to question 49.

51. So far as I can judge, the proportion of habitual moderate consumers among bad characters is from 10 to 15 per cent. The connection which

the moderate use has with general crime is that the consumers commit crimes with impunity, and encouragement caused by influence of smoking ganja especially.

52. The proportion of excessive consumers among bad characters is from 5 to 8 per cent. as appears from general observation. The excessive consumer is likely to commit crimes of more serious nature.

53. Of course excessive indulgence very rarely incites unpremeditated crimes of violence, such as homicide and offences against chastity. I remember to have read in some medical works that a consumer murdered a man by strangulation while in the state of intoxication from the effect of ganja.

54. Yes; the criminals intending to commit acts of violence have been known to use ganja to fortify themselves.

55. Criminals in order to carry out their designs often induce victims to partake any of these drugs, so that they may be stupefied, to afford every possibility of being deprived of their property. These cases generally are to be met with during journeys. A man can be completely stupefied by being administered ganja and charas, but criminals generally mix dhatura for the purpose.

56. The admixture of other substances, such as dhatura and tobacco, changes its effects. However small quantity of dhatura be adulterated, it greatly enhances the effect of intoxication, as it is one of the principal ingredients of *Cannabis sativa*; but the consumers for their personal use mix it in a very small quantity, but while administering to others mix a greater quantity of it.

57. So far as I know I have never heard or seen persons eating or drinking ganja and charas, except in case when no bhang is available they substitute ganja for bhang in drinking.

Oral evidence.

Question 1.—I was educated at the Nagpur Medical School, and passed as Hospital Assistant. I have served in Balaghat, Jabalpur, Nimar and Seoni, and was six months in the Jabalpur Asylum.

Question 39.—Cannabine is the resin of ganja or hemp. It is not decomposed by smoking.

Question 45.—By "sure" I mean "likely" in the end of the first paragraph. I have seen cases of insanity from excessive ganja smoking. One was the man Udairam, the Burhanpur Tahsil Jamadar, elder brother of the municipal clerk, Gangaram of Khandwa. There was no other cause apparent. I knew nothing of any admixture. The case was treated by Dr. Quayle. He often asked for ganja in hospital, saying it would cure him. He was about a month in hospital. He did not recover. He was quiet sometimes from sedatives, and then was violent. He was sent to the Jabalpur Asylum, and (I hear) died there. He was sent there (I think) in 1891. He was talkative, violent, singing occasionally. The pupils were dilated. This is the way with ganja as well as with dhatura. I have observed the pupils of ganja smokers when smoking. They are dilated. There was no reason to think that this man took

dhatura: that is not common. There was no insanity in the family, nor had the man epilepsy. I do not know the father's name. I remember also a Muhammadan fakir being brought to hospital at Wara Seoni in a state of insanity. His previous history was not known; but we knew he took ganja. He was filthy in habit, liked to go naked, assaulted women. He was sent to Balaghat. I do not know what became of him.

The second part of my reply to question No. 45 refers to insanity from all causes. Some of these symptoms appear singly or conjointly in ganja insanity. I have myself seen them. I do not know any typical symptoms of ganja poisoning except the dilated pupils. This would also be caused by dhatura; but dhatura insanity is of a more temporary character than that arising from ganja. The asking for ganja would also be a typical symptom.

I think ganja injurious, and bhang, though less powerful, is of the same character. I think that if a man takes ganja long he is likely to be insane. I think that it makes madness more likely; I think 50 per cent. of the insanes in the Jabalpur Asylum were from ganja. This was in 1882, I think. It is long ago and I cannot accurately remember the proportion. It was large. I was only temporarily there as a substitute. Therefore I have not very effective experience. I had only just left college a little before. I had never seen a case of insanity before.

Question 46.—I think that those who remain moderate consumers, and do not fall into the excessive habit, are few. This is in my opinion true of all intoxicants. I have served in cities and towns, and have not experience of village life. I have seen two or three cases in my hospital practice of men attributing loss of appetite, etc., to ganja. One man was brought to me (a fakir) insensible from ganja, and a man with fever once asked me if I could give him something to cure a tendency to impotence. I have never seen any other cases of illness ascribed to ganja. I have seen cases in which the administration of cannabis as medicine in dysentery led to violence and a form of intoxication. In mania it is a sedative. I have not found ganja to be a cause of disease. Beyond what I have said, it has never come before me. I have never seen an asthma, bronchitis or dysentery case arising from ganja. I have only had one case of insanity in my hospital practice.

Question 47.—I think that if any one is insane his children will probably be insane. I have never seen a case of hereditary insanity.

Question 51.—There is a slip here: what I mean by "with impunity" is "without fear."

Question 53.—By "very rarely," I mean occasionally, but very rarely.

Question 55.—A man who does not take hemp drugs can be made senseless by pure ganja or other hemp drug. But not a habitual smoker.

Question 56.—I think that dhatura is generally mixed with ganja. I mean it is one of the commonest admixtures, i.e., those who mix anything generally mix dhatura with their ganja.

43. *Evidence of MIR ZAMIN ALI, Pensioned Hospital Assistant, Jabalpur.*

1. I had the following opportunities of obtaining information regarding the matters connected with hemp drugs:—

(a) That I had been the Superintendent of the Lunatic Asylum at Jabalpur for ten years, that is, from 1871 (A.D.) to 1881 (A.D.), and so I had a great opportunity of observing and examining lunatics, made by the use of hemp drugs.

(b) That by my private practice of long standing in this city, I have come across many diseases produced by the use of hemp drugs.

(c) By my mixing with persons of all societies and ranks, I have obtained much information regarding the matters connected with hemp drugs.

2. The hemp plant which is grown in this province is called 'pathari' or 'pahari,' and the ganja prepared from its flower-top is of flattened shape, and bigger than the round ganja (*baloo chur*) which is produced in the Himalaya Terai, viz., in the districts of Gonda, Bahraich, etc. The flattened ganja of this province is less strong than the round (*baloo chur*). The *baloo chur* is brought for sale to this province also.

3. In this province the ganja hemp plant grows spontaneously in the jungles of the Khandwa district. The reason is that when any labourer happens to smoke ganja in a jungle, its seeds often fall there, and plants grow out of it which gradually increase in number.

4. That jungly ganja is not publicly used in this city, and therefore its name is not known.

7. In the Khandwa district the hemp plant is cultivated for the production of ganja, bhang, and seeds.

10. In this province the persons who cultivate hemp for its ganja are of the same class as other agricultural cultivators.

11. No; in this province the plants cultivated for the production of ganja are not raised from the seed of the wild hemp.

14. Ganja and bhang are prepared to a small extent in the Khandwa district of this province, but to a great extent they are brought from other provinces and Native States.

16. In this province most of the persons use the broken leaves of ganja as bhang. In this province charas is not prepared.

18. Yes, all these three drugs deteriorate by keeping. If it is rotten and some sort of insects produced in it, it quite loses its effect. With ordinary care it can keep good for one year. It often deteriorates by damp. Therefore, if placed in a good dry house its deterioration is not rapid.

19. In this province ganja is used only for smoking.

20. In this province ganja is used to a great extent. Few persons use charas here. Almost all the sadhus and fakirs and a greater part of labourers smoke ganja.

21. In this province flat ganja is used.

23. In this province bhang is never used for smoking.

24. In this province people generally drink bhang. They eat it in the form of majum.

25. The use of ganja and bhang is on the increase in this province. The reason is that the shops selling them being very numerous, and at very small distances, these things (ganja and bhang) can be had everywhere, and at every time without any pains. Charas is not sold in this province, and, therefore, it is used by few. The shops selling ganja and bhang, which are placed in almost every village, being always in their view, leads them more to their use.

26. In this province, of the consumers of ganja, the bulk is of the excessive consumers; and of the consumers of bhang, the bulk is of moderate consumers and occasional excessive consumers.

27. The excessive consumers of ganja in this province are mainly taken from the low classes of the people, who are labourers, sadhus and fakirs (a sort of beggars and devotees). The labourers are led to the practice of consuming ganja, because in its intoxication they find some relief from fatigue, and under its influence they can withstand hard labour. The sadhus and fakirs use ganja, because, firstly, influenced by its intoxication they are better able to meditate deeply on their deity, and, secondly, by the use of ganja they can destroy their appetites for sexual indulgence, which is the great control required in a sadhu. Moderate consumers of bhang are mostly from the upper classes of the Hindus. They use it for luxurious indulgences, because they are prohibited from using liquors by their religious restrictions.

And the occasional and excessive consumers of bhang are the same moderate consumers and others also, who on some festivals consume it excessively. Most of the rich persons use it moderately in any syrup as a cold drink.

28. The average allowance and cost of ganja per diem to habitual excessive consumers is one tola, worth 2 annas.

29. Ordinarily, dried leaves of tobacco are always mixed with ganja in order to make it stronger; dhatura seed is also seldom mixed with ganja and bhang to make them strongly effective.

30. The consumption of ganja and charas is practised more in company than in solitude. The habitual, moderate consumption of bhang is practised more in solitude. But the excessive, occasional consumption of bhang is practised often in company. These things are mainly confined to males of riper age. It is not usual for children to consume any of these drugs.

31. Yes; the habit of consuming any of these drugs is easily formed. Yes, when once formed, it is difficult to break off all at once. Yes, ganja and charas have this tendency, to a great extent, for the moderate habit to develop into the excessive. Bhang has also this tendency, but to a small extent, and for those only who indulge in its use very much, and who habitually use it for the sake of intoxication. But this tendency of bhang has no effect on those who use it as a cold drink in the hot weather.

32. There is a festival *Shivaratri* among the Hindus, in which there is a custom that the Hindus offer bhang to their god Shiva, and then they also drink it as a *persad*. The use of bhang in connection with the above-mentioned festival is not very essential: it is a mere custom which can be done away with very easily. It is generally temperate. It is not likely to lead to the formation of the habit.

33. The consumption of ganja and charas, and also excessive consumption of bhang, have no favourable opinion among the people. The habits of consuming them are regarded as very low and mean. The social opinion in regard to the practice is very unfavourable and scornfully against. According to the Muhammadan religion they are strictly forbidden. The use of all forms of the narcotic is generally in disrepute, because its use has always produced bad results, such as insanity, immorality, weakness of constitution, and many others. In this province there is no such custom of worshipping the hemp plant on any occasion and by any sect of the people.

34. It would not be a serious privation to any class of consumers to forego the consumption of the drug they use, for I have seen many cases of excessive consumers of these drugs, who, when they were put either in the gaol or in the lunatic asylum, could live easily without the consumption of the drug they used to consume habitually.

35. Yes, it can be practicable to prohibit the use of all of these drugs, but by wise and gradual measures. Yes, if stopped all at once, those who are strongly and deeply addicted to the use of these drugs, would consume them illicitly. The prohibition could be enforced by wise and gradual measures which, according to my humble opinion, I have given on a separate paper annexed herewith. If stopped all at once it will occasion discontent among the habitual consumers. But such discontent will not amount to any political danger. The prohibition will not be followed by recourse to alcoholic stimulants, because both the Hindus and the Muhammadans are strictly forbidden by their religions to use any sort of alcoholic stimulants. But there is probability of their taking to madak, opium or dhatura.

36. As regards this province, I have no reason to think that alcohol is now being substituted for any of these drugs.

37. Charas affects on the system sooner than ganja and more strongly. By smoking charas seldom sudden deaths occur as in apoplexy.

38. The round ganja, *viz.*, baloo chur, has stronger effect on the consumers than other kinds of ganja (the flat and chur).

40. Bhang is prescribed by Hindu native doctors (*i.e.*, baid) in stricture, chronic gonorrhœa, and heart diseases.

41. (a) Moderate use of bhang may be beneficial in its effects as a digestive.

(b) Moderate use of both ganja and charas can give staying power under severe exertion or exposure, and to alleviate fatigue.

(c) No.

(d) In no other way.

Labourers use ganja to have staying-power under severe exertion and to alleviate fatigue. It is the moderate occasional use of the drug which I refer to.

42. Ganja and charas are not harmless in moderate use, for ganja and charas even in habitual moderate use affect the lungs and the heart.

43. Even the moderate consumers are often very offensive to their neighbours. Even by moderate use of these drugs the consumer becomes very irritative and peevish, and so is always as a thorn in the side of his neighbour.

44. The immediate effects of even the moderate use of ganja and charas on the habitual consumer are the burning of throat and violence of temper.

Yes, though refreshing to the consumer, but dangerous and offensive to others. Yes, it produces intoxication, but not so much as to make the consumer senseless. Yes, it allays hunger. No, it does not create appetite. The effects of both ganja and charas last for six hours. The after-effect is idleness. Yes, the want of subsequent gratification produces longing for them.

45. Yes, even the habitual moderate use of ganja and charas and bhang do produce very noxious physical, mental, and moral effects. Yes, ganja and charas impair the constitution while bhang makes unusually fat and produces bronchocele and hydrocele. Ganja and charas injure the digestion and cause loss of appetite. Yes, ganja and charas cause dysentery, bronchitis, and asthma, and bhang affects urinary system. Yes, ganja and charas and bhang also impair the moral sense and induce laziness and habits of immorality and debauchery. Yes, ganja and bhang deaden the intellect and produce insanity. I, while in charge of the Lunatic Asylum, have marked that more than 50 per cent. lunatics are caused by ganja and charas and bhang. They cause mostly permanent insanity, and that insanity is very violent in the beginning, and lastly he becomes an idiot. The insanes do not confess to the use of the drug, if they have no recorded history of ganja.

46. Habitual excessive use of any of these drugs leads to the above-mentioned harms, very rapidly and strongly.

47 and 48. No hereditary habit. But the children are often led to follow the example of their father.

49. Yes, the moderate use of all these drugs is practised as an aphrodisiac. Yes, it is so used by prostitutes. Those who are habitually given to the use of these drugs, get no injury by using them for this purpose, but those who are not habitually given to their use, get injury on their lungs and hearts. By excessive use the hemp tends to produce impotence.

51. Almost all are of bad characters.

53. Yes.

54. Yes, these drugs and other intoxicating things are always used by criminals to fortify themselves to commit a premeditated act of violence and other crimes. Whenever any one goes to murder, theft and other horrible crimes, he always takes some narcotic or alcoholic stimulant.

55. Yes, criminals often, in order to further designs, induce their victims to partake of their ganja or charas and so stupefy them. Those who are not addicted to the use of these drugs can be completely stupefied by these drugs without admixture.

56. (a) The effects of these drugs even in moderation are injurious, as I have shown before.

(b) It becomes more dangerous when modified by the admixture of other substances, such as dhatura, etc.; dhatura is generally mixed for administration to others.

57. In this province broken ganja leaves are drunk instead of bhang, for bhang is not produced in this province.

58. The present system of excise administration in this province is favourable to the increase of the use of these drugs.

59. Therefore in order to discourage the use of these drugs, the number of shops selling these drugs should be reduced, and should be placed at

great distances. And the cultivation also of these drugs should be lessened and finally stopped.

62. Yes; the cultivation of the hemp for the production of bhang should be controlled, and it would be feasible by the orders of the Government.

69. The wishes of the people are never consulted or considered before a shop is opened in any locality. No measures are taken for this purpose. The contractors with the consent of the Daroga open a shop in any village or place, where they think it will command good sale.

Special opinion on the subject as a whole.

The use of the hemp drug, whether excessively or moderately, and habitually or occasionally, is very bad. It contributes to the poverty of India. It degenerates the moral character of the people and undermines their constitution. It is owing to this hemp and other intoxicating substances that so many horrible crimes are committed here. It is owing to this hemp drug, and hemp drug alone, that the bulk of the people have grown indolent. It is owing to this drug alone that so many idle persons live on the alms of others, because they cannot work and thus are very burdensome to the people. It is under the influence of these intoxicating drugs and liquors that there are always quarrels, contentions, riots, and feuds. It is owing to these narcotics and alcoholic stimulants that this tract of land teems with murders, thefts, debaucheries, and frauds. It is owing to these narcotics and alcoholic stimulants that notwithstanding the benign rule of peace and justice of the British Government, there appears to be anarchy and confusion. It is owing to these, and these alone, that lunatic asylums are fraught with idiots and insanes, and gaols with prisoners. This evil, therefore, requires to be eradicated as soon as practicable. It is the duty of every Government to enact such laws and regulations which may check the committal of different crimes. Therefore it is incumbent on the British Government, just as it is, to take measures to uproot this great evil, which lies at the bottom of all crimes, as soon as possible. Though the Government will be put to a pecuniary loss by stopping the use of these drugs, yet it can make up the loss by imposing heavier taxes on foreign alcoholic liquors and other such things which are imported to this country. We can gladly suffer to pay heavier taxes on alcoholic stimulants whether foreign or native. Besides this, if the Government is put to a little pecuniary loss in effecting the well-being of its subject, it should bear. Because, when the subject is in prospering condition, that loss can be more than compensated. According to my humble judgment a few steps that can be taken for the removal of this evil are the following:—

- (1) That the use of these drugs should be stopped gradually and not all at once. Though no serious harm can be expected by stopping it all at once, yet it would be better and would go easier with the consumers of these drugs, if their use is stopped gradually.
- (2) Firstly, the number of shops, which are in almost all villages, should be reduced and placed at great distances.

(3) The cultivation of these drugs should be reduced gradually and finally stopped.

(4) Not more than a fixed quantity of these things should be given daily to each consumer, except on occasions of necessity (which should be proved), and this fixed quantity should be reduced day by day till it comes to zero.

(5) That a register should be kept, in which the name of the present habitual consumers should be put down. If anyone whose name is not in the register is found using any of these drugs (without being prescribed by any doctor) he should be punished severely. And no new entries should be made in that register.

(6) Any one found too much intoxicated by any of these drugs or alcoholic stimulants should be punished severely.

By such means in the course of a few years it should be altogether stopped.

Oral evidence.

Question 1.—I was educated in the Medical College, Calcutta, and received a Hospital Assistant's diploma.

Question 3.—I have visited the Khandwa-district twice and heard that the hemp plant grew spontaneously there.

Question 25.—There are not ganja shops in every village, but I think there are too many shops. I cannot mention the tract in which the shops are too numerous.

Question 26.—My answer refers to the town of Jabalpur where I believe the excessive consumers are 75 per cent. of the total number of consumers. I do not refer to the villages.

Question 37.—I remember a man smoking charas and dying on the spot. It occurred in Jabalpur sixteen years ago. He was a young Hindu, a bania, and died in the sarai. He was a traveller. I don't know where he came from, and the people on enquiry said he had died from charas. I know no other case.

Question 43.—Ganja smokers are offensive, because they are violent and quarrelsome.

Question 45.—The percentage of insanes I have mentioned is according to the registry, based on police reports, and I consider that that information is the best that can be obtained as to the causes of insanity. Very few ganja insanes were discharged cured. In the report for 1880, the percentage of ganja insanes is entered as 46. I left the Asylum in August 1881, and know nothing about any special enquiries made by Dr. Rice and subsequent fall of percentages.

Question 53.—My answer is based on the violence of ganja lunatics admitted to the Asylum. I have seen no such case outside the Asylum.

Question 58.—My answer refers to the Jabalpur city only, where the shops are too numerous. There are also too many shops in the neighbourhood of Jabalpur. There may be twenty shops in Jabalpur, but I cannot reckon them up. I am not aware that there are only six shops.

Question 59.—If ganja is restricted, the people of lower and middle classes in Jabalpur will take more liquor. I consider ganja is more injurious to the public health than liquor.

44. Evidence of FAKIRCHAND, Brahmin, Baid and Pandit, Jabalpur.

20. Ganja is the drug of the very poor and of fakirs.

45. I have known hundreds of ganja smokers and I smoke it myself. I have never known a case in which it did any harm. I give it as a medicine for diarrhoea. I do not believe that ganja causes the illness called "*damma*." It is as common amongst people who never touch ganja.

47. I have not observed the ganja habit to be hereditary.

59. The price should certainly not be raised. But the drug should be sold direct by Government, as the contractors cheat the people in retailing it.

Oral evidence.

Question 45.—My age is 55 years. I have smoked ganja for thirty-five years. I learned it in the society of fakirs or mendicants wandering about who came to Jabalpur. I only occasionally take bhang. I take ganja regularly. I take tobacco with it. I sometimes add musk, nothing else. I do not know about admixture of poisons; but I have heard of its being done. Old ganja does not intoxicate enough. I smoke six to eight or ten chillums a day. The labourer smokes alone. But we do not smoke alone. Four or five of us smoke together. Two tolas suffice for three or four chillums and will go round as many as fifty people. In a tola of purchased ganja three-fourths will be real ganja (leaving sticks); but the present ganja is bad and only yields one-half. A tola of ganja will give four chillums for single consumers or for two or three people at a time. I think that the consumption has decreased owing to the very high price and the age of the

ganja sold. I have steadily smoked for thirty years, and have good health and always appetite. I have no asthma, nor have I any cough that troubles. I have never been intoxicated, *i.e.*, insensible, from ganja. The baluchar ganja makes the head swing. It is stronger than the other. I have never seen a ganja smoker grow mad. I have seen B.A.'s and M. A.'s go mad, but no one from ganja. I can bring two hundred old men who are hale and hearty, who have smoked fifty years. I do not take liquor except occasionally as medicine. Ganja has a bad name. People who do not take it call us "ganjeri," as I should call a man who takes liquor "sharabi," and a charas smoker "charasbaz." The man who does not use an intoxicant calls the moderate consumer a debauchee. The poor man really requires it, as also the fakir for his exposure: to the rich it is luxury and so a vice. It is since Mr. Nicholas was here that the great set was made against ganja.

If a man takes ganja excessively, he will have a bad name, he will become weak and thin; but he will not become insane; neither will he become insensibly intoxicated (as in the case of liquor), however much he takes. He will not go about smashing things and behaving like a mad man as he would with too much liquor. Ganja tends to religious meditation.

I am a Baid. In dysentery, diarrhoea and coughs, ganja is useful. The ashes are useful in asthma, taken in pân. I know Hindu books on medicine. They never ascribe insanity to ganja. My sons died young and therefore never took ganja.

I am a Brahmin and priest or preacher. I am also a wrestler.

45. Evidence of KHUSHALI RAM, Honorary Magistrate, Chhindwara.

3. I have never seen or heard of the plant growing in the Chhindwara spontaneously. I have not heard of spontaneous growth anywhere.

4. I know of no other name for the plant.

7. There is no cultivation in this district.

10. When there was cultivation in Katol it was not carried on by any special class.

14. Ganja is received from Nimar. Charas and bhang are not regularly prepared in this district. But persons who drink bhang may prepare it for themselves.

15. Bhang is prepared by grinding the leaves of the plant and mixing them with water, and a little sugar is added. A kind of sweetmeat is made called majum or majam. The leaves of the plant are steeped well in water, then ghee is added. The leaves are then wrung out, and with the water are thrown away. The ghee is then mixed with sweetmeat. I have heard how they prepare charas in Malwa and Indore. It is not prepared here. The people brush the growing plants when they are in 'masti' with pieces of leather, the resinous matter which sticks to the leather they scrape off and make it into little balls which are smoked in a small pipe like madak. The leaves of the plant are also sometimes fried in ghee and eaten with sugar. It is called "talli bhang."

16. Yes, if they drink bhang. The custom is not common. I have no experience of the wild plant.

17. There are no special classes of manufacturers of these preparations here.

18. Ganja loses its effect by time. It could be kept good two years. Here fresh supplies are received year by year and so no special measures are taken to preserve it.

19. Ganja is used as a medicine by native doctors and is used as such specially for cattle disease. It is used to improve the appetites of horses.

20. All castes smoke ganja, especially gosains, fakirs (Muhammadan), bairagis, Ahirs, Gonds, of whom the whole castes are addicted to this practice. Members of all the lower castes smoke ganja and some of the higher castes, but among the latter is considered as a disgrace. It is smoked all through the district by the labouring classes. Charas is not smoked.

21. Flat ganja is always sent here.

22. Not used.

23. No.

24. The higher castes eat 'majum' and 'talli hui' (as described above) and specially so at Holi time. Marwaris eat 'talli hui bhang.' The lower castes drink bhang. The practice of frying bhang

is most common in Bhopal, Indore, etc., and among those who have come from there.

25. The use of the drug has become less frequent among the better members of the community. The others use it about as much as before, especially in the jagirs. The reason of the decrease among the former is the opinion that it is not a proper thing to do.

26. (a) Gond, Ahir labourers generally.

(b) Fakirs, gosains and bairagis.

(c) and (d) Can't say.

27. See above.

28. Can't say.

29. Dhatura is so used to increase the intoxicating effect. I know of no other ingredient. I know of no such substance being sold.

30. The drugs are sometimes consumed in solitude, but the consumers prefer to congregate together. It is confined to men. Boys do not smoke till after 15 or 16, when they continue all their lives. If a man begins he never leaves off. Children are never given the drug.

31. It is easily formed and hard to break off. There is a craving for the drug, but no illness results from suddenly breaking off the habit as in the case of opium. A man goes on always taking only a little of the drug, but if he once increases his dose, he is nearly sure to go to excess.

32. There is no religious custom requiring the use of the drug except perhaps that of the bairagis, who do so as they say Mahadeo did. At Holi people generally use it, but only to make them lively.

33. (a) Among low castes with tolerance; among high castes it is thought somewhat of a disgrace from its intoxicating effects.

(c) No worship of this sort occurs here.

34. It would be a similar privation to most consumers as would occur from the prohibition of any other luxury. It would not be such a privation as the prohibition of opium. No one could say that it was an interference with his religion.

35. There would not, I think, be any serious discontent or disturbance, as none followed the prohibition of the growing of the plant. The consumers are too weak and devoid of influence to cause any political danger. They would probably take to other drugs.

36. No.

37. The effect of charas is intoxication, much as opium, while that of ganja is more detrimental, ending sometimes in madness. The temporary effect is much the same and does not make the consumers disorderly at the time, as they sleep under the influence of the drug.

38. Have not seen these three kinds.

39. Smoking is the most injurious, as it affects the intellect, dries up the body, and causes bad coughs.

Eating and drinking bhang is not so bad; it makes a man light-headed and makes him chatter, but his body is "mazbut," "taiyar."

40. See answer 19. It is often given for cattle disease. It is given to horses when tired to remove fatigue. It is not often given as a medicine to human beings.

41. (a) No, it increases appetite but not digestion.

(b) Perhaps to those accustomed to it.

(c) No.

(d) No.

42. I am of opinion that in moderation the drug is harmless, except as leading to greater excess.

43. No.

44. Perhaps it is refreshing. Ganja smoking produces immediate intoxication, which only lasts about half hour. Bhang drinking does not cause intoxication for some time and lasts longer. Bhang creates appetite, ganja does not. The habitual consumer will feel no after-effects, but a casual consumer gets "hot coppers." There is a craving for the drug if not obtainable.

45. (b) No.

(c) No.

(d) Not dysentery but bronchitis, and asthma almost certainly.

(e) It causes laziness and reduces the power for sexual intercourse, and so of sensual feelings. This is one reason why bairagis take it.

(f) The excessive use of the drug, but not the moderate use, impairs the intellect and produces insanity. I have seen many lunatics who have become so thus.

46. The constitution is impaired. Digestion is not injured. Bronchitis and asthma are caused.

47, 48 and 49. No.

50. It produces impotence, partial at any rate.

51. There is no connection between ganja smoking and bad character except in so far as the bad characters belong to the castes and classes who habitually use the drug.

53. It is possible. I know of no case of homicide or attempt caused under the influence of the drug.

54 and 55. I have not heard so.

59. I am of opinion that it is capable of improvement in the direction of checking the use of the drug and ultimately prohibiting it.

67. I should like the taxation to be enhanced to increase the price.

68. Persons do not here smoke at the shops.

69. No. No, because local public opinion, being uneducated, would be in favour of greater extension.

70. No

46. Evidence of GANGADHARRAO MADHO CHITNAVIS, Honorary Magistrate, Nagpur.

1. I have been able to collect information from bairagis and others who stop in the temple of Jageswar in Budhwari. The temple is under my management as a member of the Bherisla Temple Fund Committee. The names of persons who have given me this information are Gauputgeer, Wushruthgeer, Mahadeogcer, Ganga Prasad, and

others. I got some information from Ghullu Patel, a well-known Malguzar in the Katol tahsil, and Kulmaj Sakharam, and other tenants whom he specially brought to me as being persons who grew ganja on their fields in the Katol tahsil before its cultivation was forbidden by Government. I have been able to get some information

from the pensioned Excise Daroga of Nagpur, Ramchandra Kasherao, and also from a sub-contractor, Chammunya, and a cart-driver of mine given to the habit of smoking ganja.

2. These definitions may be accepted for our province. It is the flat ganja which is generally used here.

3. I know of no particular district where it grows spontaneously. It grows by cultivation. It was cultivated some time ago by people in the Katol Tahsil, but its cultivation there is now forbidden by Government. It is now cultivated only in the Khandwa district.

4. It is known by the names of ganja, bhang, and a preparation of it by the name of majum. Charas is seldom used in these provinces. The flowers of the hemp plant are made into ganja. The green colouring matter repeatedly washed from the dried leaves of the plant is named bhang; the extraction of its resin by its being boiled with ghee, and the jelly so obtained, when cooked with dried milk and sugar, is made into majum.

5. It requires high land for its cultivation. It generally grows well on white land quite near the village.

6. The ganja is said to grow dense, but it has to be weeded and thinned before it can be expected to bear fruit. I cannot say if the growth of the wild plant is ordinarily dense or scattered.

7. The hemp plant is cultivated in the district of Khandwa for the production of ganja and for its use as bhang. The bhang made from Khandwa ganja is not so generally used as the Marwar bhang. The plant was cultivated very largely in the Katol tahsil, but it is now forbidden.

8. I have reasons to believe that there is a decrease, and the decrease is due, they say, to the very strict scrutiny and restriction under which it has been placed by Government. The cultivators are required to sell the ganja to one wholesale vendor, and the prices are not regulated by the usual laws of supply and demand. This is one principal reason why there has been, they say, such decrease in its cultivation.

9. The seeds are put down about the end of May or beginning of June, and as soon as the seedlings have fairly sprung up, the ground is carefully cleared of weeds and the plants thinned so as to leave an open space of three or four inches between. The process of *bakharing* is by means of a *bourdened bakhar*, so as to allow a man to walk between the rows of seedlings planted. The plants are cut in October—November. It is the female plant which bears the fruit, and the other plants are required to be carefully weeded out.

10. They do not belong to any particular class. It is the common cultivator who grows it.

13. The cultivation of the hemp plant has been restricted in my province to the Khandwa district only.

14. Ganja is prepared at Khandwa: charas is seldom prepared. Bhang is also very generally prepared.

15. The flowers or kalis are made into ganja. Charas is the resin which freely exudes from the leaves as the resin which is retained in the flowers and twigs, while bhang is the green colouring matter that is repeatedly washed from the dried leaves of the plant. This diluted with water and milk is used as a refreshing draught. Another favourite form of using these leaves is to extract the resin from them by boiling them in water with

ghee. The jelly so obtained is cooked with dried milk and sugar into a paste, which, when cooled, hardens sufficiently to be cut into small tablets. The preparation of it is termed majum.

16. Bhang is always prepared by people in their houses.

17. The preparation of ganja is made by the common cultivator. Bhang is made by persons in their houses irrespective of class or creed. The preparation of hemp into majum is made by halwaies or sweetmeat sellers under a license.

18. All these drugs do deteriorate by keeping. It does not lose its effect for one full year. It can be kept well with ordinary care for a year and-a-half. It gets rotten by being kept in closed doors and without sufficient exposure to weather. They generally keep it in open air to prevent it from deterioration.

19. Ganja and charas are only used for smoking purposes. Ganja is very generally used by cultivators as a medicine for some special diseases of cattle.

20. Some very few cultivators do smoke ganja, but the generality of persons who mostly smoke it are artisans, labourers, sweepers, Bhoes or palki-bearers, gosains, bairagis, fakirs, Gonds, Raihadees, Bhamtees, Garodees, syees, and others. Travellers and pilgrims who walk on foot or who always expose themselves are generally addicted to it. The mendicants also smoke this drug. The localities where it is generally used are sarais or inns, and places where the pilgrims, fakirs or gosains, generally stop. There are no localities particularly appropriated for such purposes such as are for madak smoking, etc.

21. It is the flat ganja which is generally used in these provinces.

22. Charas is seldom used in these provinces.

23. Those who are excessively addicted to ganja smoking, and who cannot get a sufficient quantity of it by reason of its high price, generally make use of bhang for smoking purposes, but very few do so.

24. The middle class population [of Northern India, and almost all Marwaris and fasting Brahmins drink bhang. It is, as a rule, to be got at any of these houses. They use it as tea, and offer it in that light to visitors of their own class. Generally one-fourth of the population use it in these districts.

25. The use of ganja and bhang both have been on the decrease by reason of its high price. I hear under the Mahratta government, so long ago as 1853, ganja was very generally used by the lower classes. It was so common as to be used like straw for plastering purposes. Education has also had much to do with its decrease. As education advances the smoking of it must decrease. As regards the middle classes, the high price and restrictions placed on it have also had the effect of decreasing its consumption. Common people cannot afford to indulge in a luxury which is every day becoming dearer.

26. I give the following information from the reports I have heard: it is only a conjecture:—

20 per cent. belong to class (a).

10 per cent. belong to class (b).

15 per cent. belong to class (c).

5 per cent. belong to class (d).

27. Gonds, labourers, and artisans belong to class (a).

Gosains, fakirs and bairagis belong to class (b).
Middle class people belong to class (c).

Gosains and other wandering tribes belong to class (d).

28. Habitual consumers spend about half an anna for the use of this drug. Habitual excessive consumers spend an anna per day.

29. Ganja is generally smoked with tobacco. Habitual excessive consumers who consider smoking ganja by itself a light intoxicant, mix it with dhatura, bachnag, arsenic, and kuchla.

30. Gosains, bairagis and labourers generally use it in company. Only middle-class men, who get addicted to it through want of self-control or through their association with classes of persons above-mentioned, generally use it in solitude. Females never use it excepting those abandoned characters who generally follow some of these bairagis and other wandering tribes as their concubines. Children seldom use it but only those of the above class of population who find it within their easy reach and who take it from the example of their fathers.

31. The habit is easily formed with association of persons who use these drugs; but it necessarily shows weak character and want of self-control. It is generally difficult to break off when once addicted to it, by reason of its producing deleterious effects on the mind if not taken and indulged in for any length of time. It has necessarily a tendency for the moderate habit to develop into the excessive.

32. It is not used here in these provinces for religious purposes.

33. The consumption of each of these drugs is looked down upon by the people. It is considered immoral in the social scale. Generally all sorts of vices are looked down upon by the better classes of society, and as this is a narcotic that is generally used by the lower classes of people, and as its consumption is necessarily very generally associated with bad characters, and also as the smoking of this drug has a tendency to make its victims demoralised and lose much of their mental vigour, the habit is looked down upon by the people. No classes of persons here worship the hemp plant.

34. It would be considered a hardship for some days, as it would tend to make them uneasy and unnerved, and they say it would altogether disincite them to work. This will be the case with habitual smokers. But the occasional smokers can throw off the habit without considering it a serious privation.

35. It would not be feasible to prohibit bhang and ganja. Charas, which is a greater intoxicant, may be prohibited. In the case of labourers and wage-earners, Gonds and others, there are reasons to believe that the prohibition of this drug would necessarily bring about illicit consumption. The smoking of it is, they say, necessary in the case of labourers to give them staying-power. It is not like madak, which makes its victims disinclined to work. Its prohibition would of course produce discontent among the labouring class. Even now, as far as I can make out, the severe restrictions imposed upon it afford cause for discontent among them. But the discontent cannot under any circumstances amount to a political danger, but it would, I suppose, create a social danger, inasmuch as people would then take to opium, which, being along with wine the sole intoxicant, might rise in value, and would thus deprive their families

and children of the necessities of life by spending an increased amount on such luxuries.

36. We have reasons to believe that alcohol is not being substituted for any of these drugs. The consumers of alcohol and ganja form different classes by themselves.

37. The smoking of charas is more intoxicating and dangerous than the smoking of ganja. It is a more wild intoxicant.

38. The effects of flat ganja are more intoxicating than either chur or round ganja. The effect varies with the classes of consumers: the effect produced in the case of occasional smokers will be greater than in the case of habitual smokers.

39. The smoking of ganja is more injurious than either drinking or eating it. They say the smoking of it has a very irritating effect, while the drinking of it has a soothing effect; and so it is that bhang has come to be used as a beverage on fast days to alleviate the heat caused in the system by abstention from food.

40. Native doctors sometimes use bhang as an antidote against dysentery, of course with an admixture of some ingredients. Some of them use it as a health restorer or tonic. They say it gives strength and matter. It is called vijaya in Sanskrit, meaning the conqueror of health. It is generally used in the case of cattle to remove the effects of fatigue, and also as a medicine in some diseases peculiar to cattle.

41. The moderate use of bhang is beneficial in its effects, but not so in the case of ganja and charas. People who use it extol it as a great digestive. No doubt in the case of labourers it gives them staying-power under severe exertion or exposure, and it does alleviate fatigue. It also acts as a febrifuge or preventive of disease in malarious and unhealthy tracts. Pilgrims and wanderers generally use it for these purposes. It is the occasional moderate use which may bring on all these results, but eventually the habit has a tendency to drift into the excessive, and then it spoils health.

42. The occasional moderate use of the drug does not injure health. I have seen many persons given to this vice good and strong.

43. Moderate consumers give no trouble.

44. Only a moderate use of the drug in the case of habitual consumers brings on a feeling of refreshment. It produces, they say, very little intoxication. It creates appetite. The effect, they say, lasts for three hours. Want of subsequent gratification does produce longing and uneasiness.

45. The habitual moderate use of these drugs does produce noxious effects, but not to the extent produced by consumption of opium and madak. A moderate use, as far as I have been able to make out, does not deteriorate the physical strength of a man to any very large extent; but it necessarily destroys his mental equilibrium. For some time it helps digestion, but when the habit becomes settled, it begins to produce noxious effects, and in some few instances causes loss of appetite. It does not cause dysentery, but in a few cases helps to produce symptoms of asthma after a course of years of regular habit. This has been the case in my own cart-driver. I don't know if the consumption of ganja has a necessary effect of demoralizing a man, but my experience goes to show that generally persons given to ganja smoking are persons who lead an immoral life. In many cases it gives an

incentive to work hard. In the case of weak persons it results in making them insane. Moderate ganja smoking does not produce insanity. Excessive smoking produces insanity, but, as a rule, it necessarily produces this effect after some time in the case of persons who smoke it with bachnag, arsenic, kuchla, and dhatura. It produces temporary insanity upon persons who are moderate smokers, but who have a weak constitution and a weak intellect. Weak persons making an excessive use of such admixtures become permanently insane. The insanity caused by pure ganja, even if it takes place, is not of a serious nature; it only deranges the mind for short intervals.

47. It does not appear to be a hereditary habit, and does not in any way affect the children of the moderate consumer.

49. It is never used as a provocative to venery, not even by prostitutes. It does not produce impotence.

50. Not even so when taken in excessive quantities.

51. I have not been able to trace the connection of crime solely to the consumption of this drug. But as bad characters generally belong to the lower classes, and as these classes of persons are very generally addicted to this vice, it generally appears that most of the bad characters are given to smoking ganja. As an Honorary Magistrate I find that the criminals who come before me are generally given to this sort of vice.

52. Of course the persons using this drug in excessive quantities are persons who are given to thefts and other offences.

53. I know of no case where the excessive indulgence of this drug has led any person to commit murder.

54. I have reasons to believe that criminals use these drugs to fortify themselves to commit premeditated acts of violence. Ganja smokers will never say this is the case, but I have reasons to believe that this is done.

55. In some instances criminals do so, but then they mix it with some such wild intoxicant as bachnag, arsenic, and dhatura; without such admixture this drug by itself is quite unable to induce complete stupefaction.

56. Ganja mixed with dhatura, bachnag, arsenic, and kuchla produces a very bad effect. It produces very bad intoxication, and criminals generally use it to fortify themselves to commit deeds of violence. To those who are used to it, it gives effect of fortification, but it quite stupefies those who are its first victims.

57. Ganja is eaten by some few persons along with an admixture of turmeric and molasses. It is drunk as bhang. The intoxication is not as bad as in the case of smoking.

59. It is said the wholesale vendor purchases ganja at a capricious price from the cultivator, and as the cultivator is necessarily under orders of Government bound to sell it to one man, there is no choice left to him to demand the price he chooses. It will be better if the Government settles the price at which the cultivator ought to sell it to the wholesale vendor, taking into consideration the cost and trouble the cultivator takes to grow it.

60. The cultivation of ganja, in my opinion, is sufficiently controlled. I think as bhang is not so injurious in its effects, some restrictions on

bhang, properly so called, might safely be done away with.

62. The cultivation of ganja for the production of bhang does not need so much restriction, as far as the effects are concerned, but it is impossible to restrict it for some special purposes and to allow it free scope for others.

68. No.

69. The opinions of the people are not consulted. I think public opinion ought to be consulted before opening such shops.

Oral evidence.

Question 25.—Ganja is still the cheapest intoxicant in this province; but I think that to raise the price would be objectionable as the lowest classes are those who use it. It is the only intoxicant except liquor the poor and labouring classes use. They require it.

Question 29.—It is the fakirs, not the labourers, who usually use the drug to excess. My information leads me to believe that fakirs, mendicants, and such persons use dhatura with ganja pretty often. My information regarding bachnag, arsenic, and kuchla is hearsay; but I know mendicants who say that they use dhatura, who have told me so.

Question 32.—My answer here deals only with ganja; but even in regard to bhang, it is generally used, but not enjoined as a necessity. It would not be considered as an interference with religion to prohibit either ganja or bhang. The latter has become associated with religion in feasts, but it is not obligatory. I know of no obligation. I am not acquainted with the Markinda Puran. It is not much read in this province.

Question 33.—Strictly moral persons do not use bhang. The names gaujeri and bhangeri applied to consumers are rather terms of implied reproach. As bhang is more used by the higher classes than ganja, there is some difference in public opinion.

Question 35.—It would be possible to prohibit ganja altogether; but there would be much illicit growth and many prosecutions. The process of producing ganja is known to ordinary cultivators. Complete prohibition would be very difficult.

Question 39.—There are people who chew ganja like tobacco. That is not so injurious as smoking.

Question 45.—Opium does more harm than ganja, because it is smoked, and in that form does much harm. The eating of opium is confined to people who are of better means and are able to afford good food, and so mitigate the evil effects. In those who are physically or mentally weak the smoking of ganja produces an effect on the brain which is like insanity, and lasts only for a few hours. It passes off and returns with the renewed use of the drug. I knew of a case of a man of weak mind who became insane about four months after giving up the drug, and his insanity was ascribed to the ganja. I do not know whether he may have used the drug secretly. He recovered and had relapses. The temporary insanity to which I referred is not the same as intoxication. It has differed in the delusions regarding relations and surroundings, and in duration sometimes lasting for a month or two. I have known cases of insanity among mendicants, but not from pure ganja, only from admixtures with dhatura. The comparative prevalence of insanity among the higher classes which I have observed in the census report seems to indicate that ganja is not a general cause of insanity. Redness of eyes is a sign I have

noticed among persons both intoxicated and insane from ganja. The same symptom exists in both. The intoxication of liquor is much greater than that of ganja.

Question 51.—By criminals I mean thieves and such persons, not those charged with assault. I should expect 60 per cent. of thieves, robbers, etc.,

in jail to be ganja smokers; one-fourth of the whole jail population probably.

Question 56.—I have no case that I can narrate. I can quote no definite case.

Question 69.—I know of no case of refusal of any representation made by the public to have a shop closed.

47. Evidence* of MIR IMDAD ALI, *Honorary Magistrate, Damoh.*

1. Is a native of Agra, but has lived in Damoh for the past thirty years. Holds two villages in the Haltia tahsil; was in Government service in the Settlement Department thirty years ago. Has compiled a history, antiquarian and otherwise, of Damoh and the district. An Honorary Magistrate.

2. Bhang is very little used and can only be obtained with difficulty: ganja leaves are used in its place. Charas is unknown. Flat ganja only used: round and chur are unknown.

19. Ganja is only used for smoking except that the leaves are used as a substitute for bhang. Ganja is used for the manufacture of majum (and so eaten) when bhang cannot be obtained.

20. Bairagis, more than any other class, use ganja and those who associate with them even to excess. It is used more moderately by labourers and low castes to ward off fatigue and cold. Twenty per cent. of the populace use ganja.

21. Flat kind only: no other known.

23. No, bhang is never smoked.

24. Bhang is drunk as a sherbet in the hot weather only, by respectable classes. The only persons who eat it (so far as he knows) are the Chaubes of the Agra and Muttra country, who practise as pahlwans. Bhang is also eaten in the form of majum.

25. Thinks the consumption of ganja decreasing owing to the enhancement of the price of late years.

26. For ganja the proportion of consumers who are—

(a) habitual moderate consumers is 5 per cent.;

(b) habitual excessive consumers is 5 per cent.;

(c) occasional moderate consumers is 22½ per cent.;

(d) occasional excessive consumers is 67½ per cent.;

27. Habituals (ganja) mainly from the bairagi class. Occasional from the poor labouring classes and cultivators.

28. Habitual moderates 1 rati $\frac{1}{8}$ of a tola of ganja in a pipe mixed with tobacco: perhaps 25 pipes in a day.

Habitual excessives 2 ratis in a pipe; perhaps 50 pipes a day.

(N.B.—This allows for the flower only which alone is smoked; the leaves and stalks being discarded.)

29. Tobacco ordinarily: dhatura very rarely. Sometimes aconite and even copper are mixed with ganja in making majum: object to increase strength. Sometimes jowar root, which is said to possess medicinal properties, is mixed with majum.

30. Ganja smoking chiefly in company but by habituals at all times. Women use it very little. Children (boys) not till they are fifteen or more. No one wishes his children to learn the practice; even a confirmed ganja smoker will beat his child if he discovers him doing it. Bhang is drunk by women and also by children. Is not thought disgraceful. Does produce little intoxication. Relieves fatigue, cools the blood and induces sleep.

31. Use of ganja is easier to discard than the use of opium. Consumers can give it up, but it is rare to find a case. It is only with habitual consumers that there is a tendency for the moderate habit to develop into the excessive.

32. The bairagi class consider it essential, although it is not prescribed in the Shastras. By its use they are enabled to assume an air of meditation and abstraction from the world, due really to ganja intoxication. This imposes on the ignorant, but is condemned by the better educated Hindus. The use of ganja, often in enormous quantities, is universal among bairagis.

33. Ganja smoking is thought disgraceful. A respectable man who smoked ganja would do it in secret at any rate at first (see No. 30).

Bhang is not looked down on by any means.

35. Does not consider it possible to stop bairagis smoking it. They wander about and often visit Native States. A general prohibition would lead to endless prosecutions, and many false ones. Does not think a ganja smoker deprived of his ganja would take to liquor. Ganja is the poor man's intoxicant: can do it for a pice on ganja, but in liquor it takes two annas' worth at least. Thinks ganja, liquor, and madak smokers three quite distinct classes.

39. Smoking of ganja is more injurious than eating its leaves or drinking bhang.

40. None of these drugs used internally as a medicine. Bhang is sometimes used as a fomentation in bowel or liver disorders over the seat of pain. Ganja leaves are given to cattle as a medicine.

41. (a) No.

(b) Yes, both bhang and ganja.

(c) Bhang is sometimes taken in fever before the expected return to prevent it returning.

Refers to moderate occasional use.

44. Bhang is refreshing and induces sleep: it excites appetite. Ganja does not induce sleep: it causes intoxication.

45. Ganja smoking (habitual) induces cough and asthma. It does not lead to immorality or reduce the frame to a skeleton as madak does. It makes the white of the eyes red and dims the sight. It does not produce madness, but does cause insanity (not permanent).

49 and 50. The excessive use of ganja if long continued leads to impotence. It is not used as an aphrodisiac in the same way that opium or madak is.

53 and 54. No, a man intoxicated by ganja is foolish and not violent.

55 and 56. Ganja is not so used unless mixed with dhatura. Knows of a case in which a bairagi gave ganja and dhatura mixed to some boys to smoke in order to obtain their ornaments. The boys died.

58 and 59. Thinks it would be advisable to raise

the price of ganja by increasing the taxation. This could not be done unless arrangements are made to stop its production in Native States. Thinks this might be done and a Government monopoly declared, as has been done in the case of salt. Suggests also that the limit of 5 tolas might be reduced.

68. Thinks it better to allow smoking on the premises than to compel people, as now, to smoke it in their own houses. Thinks the latter rule causes ganja smoking to increase.

70. Knows there is much smuggling from adjoining Native States. Has no special knowledge.

48. Evidence of CHAUDHRY UMBAO SINGH, *Honorary Magistrate, Jubbulpore.*

Question 33.—There is a feeling of disapprobation against a man of wealth or standing who smokes ganja. It is thought to be the right thing for poor and naked labouring men. Brahmins of course are forbidden to touch ganja, but they also drink a preparation of bhang in the hot weather.

Question 41.—I think the consumption of ganja in small quantities is beneficial. I used to take contracts on a large scale, and I know that the coolies after a long day's work used to derive benefit from their chillum of ganja at night.

Out of my coolies I estimate that 90 per cent. smoked ganja. Sadhus also universally use ganja instead of clothes and bedding in the cold weather.

Question 45.—I have never had personal experience of any person suffering severely either in health or in pocket from smoking ganja.

Question 53.—I have never known a case of insanity or violence arising out of ganja. Excessive doses of ganja end in stupor and not in violence.

Question 65.—I think the duty should remain unaltered. The drug is the poor man's luxury.

49. Evidence of SETH BACHRAJ, *Honorary Magistrate, Wardha.*

1. I have seen several cases of ganja smoking and bhang drinking in different places, and have lived near to them.

2. These definitions may be accepted.

3. It grows spontaneously near Hardwar and Badrinath and in Nepal.

4. It is known as the ganja plant.

6. It ordinarily grows densely.

7. Formerly hemp was grown in the Nagpur and Wardha districts; but the practice was stopped about fifteen years ago. It was grown for the production of ganja only. Hemp is also grown for fibre. It is then called *san*. It is in appearance the same as the ganja plant; but it has no intoxicating properties, and could not be made to produce ganja or bhang. Ganja is at present grown in Nimar; but I don't know about its cultivation.

10. There is no special class of persons who cultivate hemp for ganja. Any of the people used to do so.

11. Hemp for production of ganja was always raised here from seed of the cultivated plant.

12. There is no wild hemp in this district.

13. It is restricted to Nimar in these provinces.

14. I know nothing about this in the Central Provinces.

In Marwar there are two plants separate from each other, and grown from different seeds. From one ganja and charas are made, and from the other bhang is made. Bhang is made from the plant from which ganja is produced also; but it has less intoxicating power, and is not so good. There is a difference in the appearance of the two plants. One is called ganja ki jhar, and the other bhang ki jhar.

15. The ganja plant has male and female plants. To make ganja or charas it is necessary to carefully eliminate all the male plants, and to keep only the female plants. The plants are then cut, and are carried to a threshing floor. The stems and flowers are then flattened with the foot, and tied into small bundles. This ganja is known as chapta ganja. To collect charas the people dress in leather coats and go through the growing ganja. The charas clings to the leather, and is then scraped off with a knife.

Bhang is of two kinds—(a) That prepared from the fallen leaves of the ganja plant. These are collected and dried, and (b) the bhang plant is different from the ganja in having no male flowers; only female plants are produced. The whole plant is dried and made into bhang.

Ganja and charas are both smoked. Majum is made by cooking bhang in ghi, and then mixing this ghi with sugar, curds, and almonds, etc. It is thus formed into a sweetmeat and eaten. Gulkand is also sometimes made into an intoxicant by adding bhang to the ghi before making the sweetmeat. This sweetmeat is very largely made in Jaipur, Ajmere, and Indore. These two preparations are the only two which I know that are eaten. Majum is made by the halwais in Wardha; but gulkand is not made here. Another way of making majum is by beating the roots of jawari in ghi until the essence of the root is extracted, and then using this to make a sweetmeat. This is even more intoxicating than majum made with bhang.

The best bhangs are known as amarser and ujjaunki. Their intoxicating power is very good, and they are generally used for drinking purposes by all the people who can afford them. The bhang is first tied up in a cloth and thoroughly

washed. This removes all the yellow colouring matter. The cleaned bhang is then pounded up with pepper-corns, and almonds. It is then mixed with water and strained. The cleaned liquid is then drunk. This is made every day. In the hot weather sugar, kuskus, rose petals and other flavourings are added. These are added to the bhang before it is pounded. This makes it a cooling liquid. Bhang, after it has been pounded is also occasionally rolled into small balls by adding a little water and then eaten.

17. There are no special classes of people who prepare these drugs.

18. All these drugs will only keep about a year. They lose their intoxicating power. I know of no means of preventing this.

19. They are only used for smoking.

20. Charas is very little consumed here, as it is not procurable, and I speak therefore only of ganja. Among the higher castes I should think that only 1 or 2 per cent. smoke ganja. Among the lower castes, such as Kunbis, Bhampis, Mahars, gosains, etc., and among Muhammadans I should think that 25 per cent. smoke it.

21. Flat ganja is used in this district.

22. Charas is not used.

23. Bhang is not smoked.

24. Majum is only eaten to a very small extent in Wardha. Bhang is eaten by all castes; but among the higher castes very few eat it. I should think about 1 per cent., and among the lower castes 25 per cent. Marwaris eat gulkand more; but it is not obtainable here, and is rarely imported. Of the local people of Wardha only about 5 per cent. drink bhang. They are mostly high caste men. The Marwaris of Bikanir drink it to a very large extent, and of the other Marwaris only about 10 per cent. drink it. All the five castes of Marwaris drink it to the same extent.

25. I consider that the consumption of ganja is decreasing, because its price is now much higher. I held the ganja contract for Wardha 15 years ago, and the price of ganja was then much lower. The use of bhang is increasing. Formerly its use was not very common; but its use among the higher classes has much increased, especially in Marwar and Benares. In small quantities its effect is to increase the appetite, and it is used for this purpose. In large quantities it relieves the minds of all cares, and is therefore used.

26. I should say that in 1,000 persons there would be 100 habitual consumers of ganja and 50 occasional consumers. Of the 100 habitual consumers, 25 would be excessive and 75 moderate. Of the 50 occasional consumers, 10 would be excessive and 40 moderate. Among Marwaris, in 1,000 persons here 100 are habitual drinkers of bhang. Of this 100, about half are excessive consumers. About 150 in 1,000 would be occasional drinkers, of whom about half would drink to excess. Of the local people of Wardha, only 25 in 1,000 would drink bhang. They are all occasional consumers to a small extent.

27. The habitual consumers of ganja are most sadhus, fakirs, and gosains, and low caste people. Gosains, sadhus and fakirs chiefly use to suppress all sensual passions. The lower castes use it because they are obliged to labour, and it prevents them tiring. Some young men use it to increase sensual passions. Bhang is chiefly drunk by

Benares people and Marwaris, and chiefly in the hot weather. It is used as a cooling drink, and to increase the appetite. Some people who use it to excess have no appetite without it.

28. The average daily allowance of ganja for habitual moderate consumers is half tola, costing anna 1. Habitual excessive consumers use from 1 tola to 2 tolas a day. The price of ganja is 2 annas a tola. The average daily allowance of bhang of habitual moderate consumers is 1 tola costing about 9 pice per day. The habitual excessive consumers use 1½ tolas a day. The best bhang from Ujjain costs Rs. 4 per seer.

29. Tobacco is ordinarily mixed with ganja. White arsenic and dhatura are occasionally mixed with ganja. This is especially done by religious mendicants to increase its intoxicating effect. For bhang massala, see answer to question 15. It is prepared in the house and not sold. To increase the intoxicating effect of bhang it is cooked in a copper vessel and heated pice are dropped into it. Milk is occasionally also mixed with bhang.

30. Ganja is generally consumed in private. It is confined to men and to prostitutes among females. It is not given to children. About 75 per cent. of consumers smoke it in private. Bhang is generally drunk in company. Females occasionally drink it and also children; but it is principally drunk by men. It is not confined to any period of life.

31. In regard to ganja, all these questions must be answered in the affirmative. Bhang is not the same. The practice of drinking it can be easily discontinued at any time.

32. I know of no customs, social or religious, in regard to the consumption of these drugs.

33. There is no mention of either ganja or bhang in religion; but the public opinion is against the consumption of ganja, either to moderation or excess, and it is regarded as disgraceful, because it is held to render the consumer insensible, and, if taken in excess, to destroy his reason. The use of bhang in small quantities occasionally is not considered objectionable, but the use of ganja is, as it reduces a man's intellect in time.

34. I don't think that it would be a serious privation to any class of consumers to forego ganja. Those who consume it to a moderate extent could give up the habit; while those who used it to excess would substitute liquor or some other drug, such as dhatura, the root of jowari, or arsenic. These would only be used by those who used ganja in the largest quantities. The others would take to opium. There would be no objection to the prohibition of the use of bhang as the habit of using it is easily given up.

35. It would be perfectly possible to prohibit the consumption of all these drugs. Such provision would occasion no serious discontent. It should be declared an offence to possess, sell or consume ganja or its products, and cases in which the prohibition was exceeded should be punished.

Such prohibition would not lead to an increased consumption of alcoholic stimulants. They would not take to opium, as it is too expensive. Some perhaps, might have recourse to dhatura or the roots of jowari or arsenic and tobacco; but I do not think that many would.

36. Alcohol is not being used in place of any of these drugs at present.

37. The effects of charas smoking are different

from those of ganja. It is more intoxicating and far more weakening. It renders the blood black and deficient in quantity. It is principally used by fakirs and sadhus, and has no good effects at all. The intoxication produced by smoking charas lasts longer than that from ganja. The smoking of ganja strengthens the smoker while the intoxication lasts, and also increases the appetite. Charas does neither of these things. Charas also destroys all capacity for sexual intercourse.

38. The round ganja is a little more intoxicating than the other forms; but the effects are the same for all three.

39. There is no ganja preparation smoked which is less injurious than drinking bhang. The drinking of bhang causes no injury in most cases while the smoking of ganja is injurious if it is used frequently.

40. Ganja and charas are not used in medicine. Bhang is, however, used sometimes both externally and internally. Ganja is used in the treatment of cattle disease with advantage, especially in foot and mouth disease and in "fasi."

41. Bhang is useful as a food accessory and digestive, and to alleviate fatigue. It is not used as a febrifuge. It is used to alleviate mental pain. All classes, but especially Marwaris and Pardeshis, use bhang for these purposes. Ganja is used to excite the appetite, and to give staying-power under exertion, and also as a prevention of disease in forest tracts, and is useful for these purposes if used in moderation and occasionally. Ganja is largely used by labourers and forest people for these purposes. Charas in moderate use is in no way beneficial. Bhang used for the above purposes in moderate quantities and habitually is beneficial. Of dwellers in the forest about 40 per cent. smoke ganja, and of dwellers in town about 10 per cent. of the labourers smoke it. Ganja, costing one pice, will give as much effects as liquor costing four pice.

42. Charas is in no way beneficial. The moderate use is harmful, as it reduces the appetite and weakens the body.

43. Moderate consumers are inoffensive to their neighbours.

44. Ganja is refreshing and a little intoxicating. It does not allay hunger, but creates an appetite. Its effects last about three hours, and it leaves the smoker disinclined for any effort. The want of subsequent gratification produces both longing and uneasiness. Bhang is refreshing. It produces intoxication, which lasts little longer than that of ganja. It increases the appetite and leaves no after-effects. The want of subsequent gratification does not produce any great longing or uneasiness. Charas is intoxicating and allays hunger. The intoxicating effect lasts longer than that of ganja, but less than that of bhang. The want of subsequent gratification would produce longing and uneasiness.

45. (a), (b), (c), (d), and (e) No, as regards bhang and ganja.

(f) No, as regard all three drugs.

46. All these drugs used in excess cause loss of appetite and weaken the constitution and induce laziness. They engender a desire for milk and sweet things. All these drugs in excess cause insanity of a permanent nature. The persons who become insane from their use are noisy and wander about, but are not violent unless interfered with. I know of no typical symptoms.

47. The habitual moderate use of these drugs is not hereditary, though children of moderate consumers would learn the habit from their parents. The children of moderate consumers are, as a rule, weaker than those of others.

48. Same as to 47; but the habitual excessive consumers have fewer children.

49. Ganja and bhang in moderate quantities are used as aphrodisiacs occasionally. It is so used by prostitutes. The use for this purpose is not more injurious than its use as an ordinary narcotic. All three drugs in excess produce impotence, and charas in small quantities also does.

51. I should say that about 95 per cent. of bad characters are ganja smokers either in moderate quantities or in excess. There is no special connection between ganja and crime. Ganja smoking does not cause a man to become a bad character; but the bad characters are drawn from the lowest classes, who indulge most in ganja.

53. No.

54. No.

55. Both ganja and bhang are used by criminals to stupefy their victims. Complete stupefaction can be produced by either drug without any admixture if the victim is not in the habit of using the drug.

56. Tobacco mixed with ganja produces less intoxication. It is used by moderate consumers. Arsenic produces more intoxication. Its effects are more powerful than ganja, and it produces complete stupefaction. It shortens life and produces madness.

Dhatura is also mixed with ganja; but its effects are less than the admixture of white arsenic and ganja. These two are only used by excessive habitual consumers. Dhatura and ganja mixed are used occasionally by bad characters to stupefy their victims if for any reason they wish to produce greater insensibility.

57. I know of no such customs.

Oral evidence.

Question 29.—It is sadhus who mix white arsenic with ganja for smoking. I have made enquiries at the Durdadari temple in Wardha. A masha or half masha is put into a pipe. A masha is $\frac{1}{2}$ th of a tola. Some sadhus take as much as 3 mashas in a pipe full of tobacco. I have not seen it so used. My information is derived from enquiries. It is mixed for purposes of intoxication and not to keep up warmth. Copper pice are employed in manufacturing bhang for drinking in order to increase the intoxicating effect.

Question 34.—The consumers of ganja are labourers who are also drinkers of liquor. If deprived of ganja, they would take to other drugs or confine themselves to liquor and would not feel inconvenience. Jowari root is the root of the ordinary jowari (*Sorghum*). It is pounded and mixed with water and ghee and then boiled. In this process an oil rises to the surface, which is taken off and made into sweetmeats. It is intoxicating. This preparation is used at marriages, and its qualities are generally known. The preparation is made up by halwais. It is more intoxicating than bhang, but less so than ganja. It grips the throat. Jowari root is not mixed with ganja for smoking.

50. *Evidence of MODAN MOHAN SETH, Honorary Magistrate, Jubbulpore.*

1. I had been ganja and bhang retail sale and wholesale contractor of several districts for several years. As great quantities of ganja and bhang used to be given in charity since sixty or seventy years, consequently I had an opportunity of obtaining information from person of different classes and of different provinces, who used the drugs, and with whom I had a talk about its consumption, etc. They were also supplied food and clothing as required, and therefore full information was obtained from them. We also use bhang on Hindu festivals, such as Shivratri, etc. In olden times people used to cultivate the drugs and consume them.
2. Ganja is obtained from ganja trees and probably charas too, but as it is not obtainable in these districts, it is heard that charas is obtained from ganja trees. The dry leaves of ganja are not called bhang. If bhang is not obtainable, ganja leaves are used instead, but they create much heat, and therefore they are burnt or thrown away. The consumers of ganja pick out the flowers only and throw away the leaves and seeds. Bhang is of two kinds: (1) Bahraich, (2) Duba. The former is of yellow colour and produces moderate intoxication, and the latter is of green colour and produces much intoxication. Ganja has three names, namely, round, flat and chur. They are thus defined: round is called kali; flat, baluchar; and chur, pitar. Ganja is manufactured as above stated. Some persons in some places take out the flowery tops of the green trees and dry them on fire and use them.
3. In these days ganja chur, pitar, is grown at Khandwa, Nagpur and Raipur. Bhang, charas, and baluchar ganja is grown in east and west provinces.
4. There is only one tree that produces ganja, but it bears different names, viz., ganja shankar bodh, turatanand, and shighra bodh, etc.
5. The growth is ordinarily a scattered one.
6. No ganja is cultivated in my district.
7. Ganja is cultivated in smaller quantities in these provinces than in former days. The reason is that in these days no place was specially fixed for the purpose, and every cultivator used to cultivate it wherever he liked. It is specially cultivated in the districts mentioned in answer 3.
9. Ganja plant grows everywhere except hilly places. There is a nursery of ganja plants, and when ready they are transplanted.
10. No particular class of cultivators cultivate ganja, but every one can do this without exception.
13. Ganja can grow on every kind of soil, and the climate which is beneficial for rabi crops is suitable for it. Ganja can grow on each and every part of the district, except rocky and hilly tracts.
14. No ganja, bhang, produced in the district since restricted by the Government.
15. Ganja is prepared for smoking in the following manner: the ganja leaves, seeds, and sticks are thrown away; dry tobacco with a little water is mixed up, and then smoked in chillums.
- Bhang is washed and powdered with pepper and sugar, etc., and then drunk. Some persons bruise it and roast it with ghee, and then mix it with almonds, cardamoms, etc., and eat it; and some drink it with milk, sugar, kesar, almonds, poppy seeds, rose flower, kakri seeds, sonf, and kasni, etc., after straining. Some boil it with ghee and prepare majun from it. Some drink it with anar juice, orange juice, curd, and sugarcane juice.
16. Bhang is prepared and drunk generally by the people in their houses. Bhang cannot be obtained from ganja trees.
18. Ganja and bhang are damaged by rains. Charas can remain good for nearly two years. Nothing can prevent deterioration.
19. Ganja, charas, and bhang are used for medicinal purposes for persons and cattle. The oil of ganja seeds is useful for rheumatic pains. The use of ashes of ganja seeds is effectual for cough, etc.
20. Ganja and charas are smoked by fakirs and other persons. Amongst the former nearly 75 per cent. and the latter nearly 40 per cent. consume the drugs. Nearly 10 out of 100 are Brahmans and Chatris, and 30 out of 100 are persons of other classes.
21. Preference is given to baluchar (flat kind of ganja) and next to it is round. Here both kinds are liked.
23. Bhang is not use for smoking.
24. Nearly every class of people drink bhang to an extent of 90 per cent., out of which 10 per cent. are habitual drinkers.
25. The use of ganja and bhang is on the decrease in these provinces for two reasons:—(1) because it is getting dear, (2) because its cultivation is restricted.
26. Fakirs and people of inferior classes are generally the consumers of ganja, but bhang is sometimes consumed by all classes of people. (1) Many use it because they are in the habit of doing so; (2) many use it to prevent sickness; (3) many use it to devote their minds to the worship of God; (4) travellers use it to put off the bad effects of climate; (5) to cure cold.
28. In these days the average cost of moderate consumers is quarter anna per diem, and 4 annas for excessive consumers.
29. Tobacco is mixed up with ganja and charas; bhang is drunk and eaten with ingredients mentioned in answer 15. Dhatura is not mixed up with bhang; but some fools do so.
30. Generally these drugs are consumed by people in company of their friends, but the habituals are excepted. Young men use these drugs. Bhang is sometimes given to children also.
31. The habit of consuming the drugs is formed like opium and liquor, etc. It is difficult to break it off. The people who do not use liquor use the drugs to devote themselves to prayers of God. There is a tendency in the case of these drugs for the moderate habit to develop into the excessive, but less than liquor-drinkers.
32. It is a religious custom to use the drugs instead of liquor as well as social, on some festivals like Holi, etc. It is not customary to use the drug on each and every festival, nor is it used largely, nor does it form a habit, nor is it injurious.
33. The consumption of these drugs on particular occasions is regarded good, but indulgence in it in every place and time is considered disreputable. On religious and social customs the public opinion is in its favour. There is no custom of worshipping hemp plant in these provinces.

34. Of course, it would be a serious privation to labourers, fakirs, and those who think it to be religious custom, to forego the consumption of the drug they use. The number of these consumers is 50 per cent. To break off the habit of consuming any of these drugs will prove injurious to health.

35. These drugs cannot be used for purposes other than medicinal. The practice of consuming these drugs should not be prohibited, but the old and rotten drugs, or the stuff containing large quantity of seeds and leaves, ought to be prohibited or be destroyed, as the use of such drugs is injurious to health.

36. It would be rather difficult to prohibit the use of the drugs and would be a sort of discontent specially to the fakirs and labourers, as it is considered by them to be their chief food. The prohibition would not be followed by recourse to other drugs or alcoholic stimulants, as the practice of consuming madak, chandu, kuchla, dhatura, and liquor, in the opinion of the public, is considered disreputable. The benefit derivable from these drugs is not derived from opium. Besides this, the other drugs and stimulants are costly and injurious to the consumers, and the prevailing of which would lead poor people to commit theft, etc.

37. Charas creates too much heat.

38. The three drugs have different effects, as stated above.

39. Ganja and bhang-smoking and drinking are not injurious. The effect of each drug is the same.

40. The native physicians have prescribed the use of these drugs on account of their medicinal qualities in ancient books.

41. It is used in other works too, the details of which have been given above. It is not confined to any class of people. Sometimes it is generally used by every class of people.

42. It does not cause any kind of injury.

44. Ganja and charas have their immediate effect, and bhang produces its effect after half an hour.

45. Excessive consumers of these drugs, with the exception of fakirs, have noxious effect. There are fakirs who smoke half a seer of ganja per day. It induces laziness, and in old age causes asthma and cough, etc. It does not impair the habit of debauchery, nor produces insanity, but to the impairing of senses weakens the intellects.

46. Sometimes habitual excessive consumers get a kind of senselessness.

47. The habitual use of these drugs does not appear to be hereditary, but depends only upon the company which the consumer joins.

49. The use of hemp does not tend to produce impotence.

50. Several persons use $\frac{1}{2}$ a seer of bhang, $\frac{1}{4}$ seer of ganja and charas, yet they do not lose their senses.

51. Though he indulges in it, yet he commits no crime.

52. These drugs do not lead persons to commit suicide.

54. These drugs are not used for criminal purposes.

55. The criminals, in order to further their designs to commit murder, do not induce their victims to partake of any of these drugs, as no complete stupefaction can be induced without an admixture of some other roots.

56. The hemp used in moderation does not cause any injury, but the admixture of dhatura, kuchla, jawr root, etc., stupefy or even cause death.

57. Ganja and charas are not eaten or drunk, but their excessive use causes senselessness, vomiting, and heat in the brain.

58. No one regards the bhang a bad drug, as every one has occasion to use it. Ganja-smokers are considered somewhat low for two reasons: (1) only the persons of inferior class and fakirs smoke it; (2) the persons who do not use it regard it as disreputable; for example, persons who do not drink liquor condemn liquor.

62. Bhang is cultivated and also grows itself, which is called wild bhang. Many persons reap the bhang trees, dry them, and then pick up the leaves; and many allow the standing trees to dry up and pick up the fallen leaves.

64. The system prevalent in the province is not objectionable, and should not be put a stop to. If so stopped, the poor labourers and the fakirs will suffer much.

65. The retail sale contract.

67. In my opinion the retail sale contract is objectionable, as the contractors increase the contract money very much without any regard to their profit or loss. During their contract, when they find themselves under loss, they sell admixture of other things, such as water into liquor, bhang leaves, rotten ganja into ganja, and earth and sticks into bhang. Such admixture of ganja is sold at Rs. 12 per seer. Short measurements are also made by which the poor consumers suffer much. It will be better if some tax is imposed on every shop, rather than putting it to public auction, and the quantity for sale be also fixed, so that they may not sell more than allowed.

68. The license for wholesale ganja should be put a stop to, as the wholesale contractors purchase the cheapest and admixture of rotten ganja, which also contains seeds and leaves in great quantities, the use of which produces several diseases.

The best system would be the purchase of ganja by the Government and sale to wholesale contractors at the rate prevalent now. By this arrangement it will not entail any trouble at all.

The former arrangement about the retail shops was good. In my opinion the city is capable of holding 20 or 25 shops. This will be liked by all and the present complaints will be removed. People will be able to obtain good stuff and would not suffer in any way. People will agree to pay Rs. 8 or 10 for each shop.

These intoxications should not be stopped or encouraged. The old arrangement should be continued. Fakirs should be exempted from payment of tax, as in case of exemption they will pray for the prosperity of Government.

51. *Evidence of KAPUR CHAND, Honorary Magistrate and Gumasta, Raipur.*

1. I have lived in Raipur for twenty-three years, and have taken ganja contracts in the feudatories of Bastar and Kanker.

2. Yes, these definitions are correct. But I have never seen "charas" here, though I have in Marwar.

3. It grows in Bastar. I have been told by my agents that they have seen as much as 50 or 100 plants growing in jungle, where no sowings can have been done.

4. I know none but ganja.

5. It wants matasi (light clay) soil and a good rainfall.

6. Sometimes one and sometimes the other.

7. Yes, in the Bastar State. The tenants sow what they want for their own use, and sell a little occasionally, but there is no regular trade in it. It is inferior ganja, the seeds being taken from the wild plant.

8. It is on the decrease, because of its inferiority compared with Government ganja, which is now easily procured.

10. There is no special caste.

11. Yes.

12. No.

16. No. Bhang cannot properly be prepared from the wild ganja. Ganja can be prepared from the wild plant wherever grown, but, as I have said, it is inferior.

17. No particular class.

18. Yes. They may with care be kept for four or five years, but they generally deteriorate after two or three. Damp is bad for them. They should be protected from damp.

19. I know nothing about charas. Ganja is, generally speaking, used only for smoking; but bhang drinkers, if they cannot get bhang, will occasionally make bhang of ganja.

20. Generally low castes and sadhus, fakirs, gosains, etc. No special locality.

21. Flat ganja is the best.

23. No.

24. No difference between (a) and (b). Hindustanis (from north of the Ganges, and especially from Muttra) and Marwaris are the principal consumers. Among Marwaris all castes drink it.

25. Neither.

26. For bhang 40 per cent. are habitual moderate consumers (a), 30 per cent. are habitual excessive consumers (b), 25 per cent. are occasional moderate consumers (c), and the remainder occasional excessive consumers (d).

27. (a) Are chiefly Marwaris,

(b) are Purbeahs and other Hindustanis,

(c) and (d) are of all castes.

28. For ganja.—(a) 1½ annas worth 1 tola.

(b) 6 " " 4 "

For bhang—(a) One or two pice } at 5 tolas for

(b) Five or six pice } 3 annas.

29. With ganja ordinarily nothing is mixed. Well-to-do people sometimes mix spices such as "jawatri" and "jaiphal." Jogis and gosains sometimes mix dhatura. This is to strengthen the ganja.

With bhang a very few people mix dhatura. Everybody mixes "massala." This consists of

kasni maloti, cucumber seeds, rose petals, almonds, pistachios, black pepper, sugar, saffron.

30. Generally ganja smokers assemble in parties of four or five. Habitual bhang drinkers drink alone. Excessive bhang-drinkers drink in company. Very few women (5 per cent.) smoke ganja and drink bhang. Children never smoke ganja and very rarely indeed drink bhang.

31. (a) Yes.

(b) Yes.

(c) No tendency.

32. It has no connection with religion. But bhang (not ganja) is usually largely consumed at the Holi by all castes not only by habitual consumers. This, however, is not a religious festival. There is no such custom connected with the Diwali or Dasera.

33. Government has classed ganja and bhang in the same category, but there is a great difference between them. No one objects to bhang-drinkers, but ganja-smoking is a vice. I cannot, however, say that there is any strong public opinion against it. It has its advantages and is therefore not to be utterly condemned, like madak-smoking. I know of no custom of worshipping the plant.

34. Yes, in both cases. Ganja-smokers are usually poor and cannot allow any more expensive stimulant. Marwaris, etc., who drink bhang, cannot touch liquor. Their caste forbids it.

35. (a) No.

(b) Yes.

(d) Yes, certainly.

(e) Yes. The fighting classes would create disturbances.

(f) Yes, in the case of the poor. Dhatura probably.

36. No.

38. "Chur" is less intoxicating than the other two.

39. Yes, smoking is injurious; it leads to asthma, etc. Eating or drinking is not injurious.

40. (a) Yes—bhang. I don't know about ganja. It is given for cholera (in which it is sometimes a valuable remedy), for piles, and for tertian ague.

(b) It is used in cattle-disease.

41. (a) Bhang or majum (a form of bhang) is useful as a digestive.

(b) Ganja-smoking gives staying-power and alleviates fatigue for two or three hours. Bhang is similarly useful, but its effects last longer.

(c) Both are useful as febrifuges.

(d) Bhang clears the intellect and facilitates brain-work.

People who have to work hard use these drugs for the above purposes. I refer to the moderate occasional use.

43. No.

44. Ganja intoxicates in a quarter of an hour and bhang in an hour. Ganja allays hunger and bhang excites it. The effects of ganja last two or three hours, and of bhang six hours. With both there is subsequent languor, but this is more in marked the case of ganja.

45. Ganja leads to asthma and bronchitis, but not to dysentery. Bhang produces no evil effects,

except general lassitude. Consumers of both drugs are apt to be quick-tempered, but this is more marked in the case of ganja. They do not produce immorality. Insanity may be produced by the excessive use of either drug. This again is more marked in the case of ganja.

46. See above.

47. No.

48. No.

49. Yes, in the case of bhang, not ganja. Prostitutes do not use it for this. There is no difference in the subsequent effects when used for this purpose. They do not produce impotence by themselves, but bhang may be the cause of excessive sexual intercourse, which will lead to impotence.

51. No. I do not think there is any connection.

52. As above.

53. No.

54. Yes, occasionally.

55. Yes. They generally mix dhatura, sometimes kuebila. Complete stupefaction can be induced without admixture only in the case of people unaccustomed to ganja.

56. The admixture of other substances strengthens the effect of ganja. The admixture of dhatura makes the drug cheaper and stronger.

57. Eating ganja is harmless.

65. I think the price is high, but I do not recommend any reduction.

66. There should not be separate rates.

69. No. I think public opinion ought to be consulted. But I do not remember any new shop being opened here.

70. A good deal comes in from Bastar into the interior of the district. The Bunjaras bring it in. I think cultivation in Bastar should be stopped.

Oral evidence.

Question 11.—Ganja can be grown from the wild seed. I have ascertained this from my con-

tractor in Kanker. In this country ganja and bhang plants are the same; in my country they are regarded as quite distinct. The wild seed would have to be cultivated for two or three years before it would produce ganja of a superior kind. The only instance of the kind that I know existed in Baster, where the cultivation had not been prohibited. Since the general prohibition the wild seed is not cultivated.

Question 16.—The true bhang plant cannot be grown from wild seed.

Question 32.—Ganja-smokers invoke Mahadeo in connection with the drug. They say Mahadeo took the drug. I do not know of its being mentioned in the shastras.

Question 35.—The sepoys are not ganja-smokers, but they drink bhang. The Purbhias are bhang-drinkers. They and the Chaubes of Mathura are the fighting classes I refer to. I speak of the prohibition of bhang, not that of ganja.

Question 40.—Bhang is a cure for cholera if given in time. It is used by *wajids* of Marwad. I gave it to my child. Don't know the practice of the hakims in this respect.

Question 45.—I know a case of a man who took ganja to excess and committed an offence under intoxication. I am not prepared to say that a man can get insane by excessive use of ganja. I never heard of such a case. A man may become intoxicated, but cannot be rendered insane by the use of the drug, moderate or excessive. I never heard of any lunatics being admitted to asylums on that account. Nor have I heard a common rumour of such insanity having occurred. Liquor and opium also produce intoxication, but not, as far as I know, insanity. Dhatura produces violent intoxication, but not permanent injury to the mind. I know of insanity as a form of disease, but such disease is not produced by the drugs. I have not read of insanity caused by the drugs.

52. Evidence of RAGHOB MAHADIK, *Malguzar and Honorary Magistrate, Rajim.*

1. I have frequently been brought into contact with people who use the drug.

2. I do not know the name "siddhi"; bhang is also known as sabji and patti.

I know nothing about charas.

I remember that when ganja was cultivated here many years ago, there were some plants which only flowered and did not set seeds. These were used for bhang only.

Yes; I know these three kinds: they are known as "chapta ganja," "gol ganja," and "chura ganja." The Government ganja now sold is mostly "chapta ganja." Ganja is also known among educated people as "bijia."

3. When ganja was cultivated here, there was occasionally a wild growth from seeds dropped accidentally; but I never saw it in any quantity, and I do not know of any spontaneous wild growth. The above was known as "lamera ganja."

4. The three names I have given above are the only ones I know. They refer to exactly the same plant.

9. It was cultivated here in black soil. It was generally sown broadcast. A few cultivators used to sow in seed beds and transplant. The transplanted kind was the best. It was sown early in the rains. It was well manured. Some people used to sow it in October mixed with wheat.

10. There was no special class of cultivators. Marars (a gardening caste) used to sow it more than other people. It was not prohibited to any caste. Even Brahmins used to sow a little in their angans.

13. It requires good drainage and a light rainfall.

15. I know nothing about (b). For smoking it is generally mixed with tobacco. Well-to-do people sometimes mix it with ghi, sugar, and spices. Bhang is pounded and mixed with sugar and spices for drinking. Majum is sweetmeats made of bhang and sugar.

16. It is generally bought ready-made, but people sometimes, if they cannot get it ready-made, make it in their houses. The same with charas. I know nothing about the wild ganja.

17. There is no special caste.

19. Ganja is nearly always used for smoking; rarely for eating (see answer 15). It is also used medicinally both for men and cattle. For men it is a tonic. For cattle it is used as a preventive of diarrhoea early in the rains.

20. There is little distinction of castes or localities as regards ganja smoking. But bairagis, gosains, and musicians, etc., use it more than others. Respectable people smoke it less than the lower classes. The Marwaris drink bhang a good deal in the hot weather.

21. The flat kind is the best, from having been more pressed; it is stronger.

23. Sometimes, if ganja cannot be procured. It is not used by any special caste.

24. No one eats bhang except in the form of majum. That is generally eaten at the Holi festival, but by a very small proportion of the people either then or at other times. 50 per cent. of Marwaris and 3 or 4 per cent. of other castes drink bhang.

25. When cultivation was allowed 12 or 13 years ago, ganja was only obtainable in the localities where cultivation happened to exist. Now that there is a *halkabandi* and ganja is obtainable everywhere, the consumption has increased. The increased price of country liquor has also tended to increased consumption of ganja. I have not observed any steady annual increase. The above applies to bhang too, but bhang is chiefly confined to Marwaris.

26. I cannot give the proportions, but I say generally that gosains and bairagis and musicians are habitual excessive consumers of ganja. The Marwaris are habitual moderate consumers of bhang, and excessive consumers in the hot weather.

28. For ganja—

(a) $\frac{1}{4}$ to $\frac{1}{2}$ tola;

(b) 1 tola.

29. Ganja smokers usually mix dry tobacco. Habitual consumers also sometimes mix spices. Bhang drinkers mix sugar, and habitual consumers spices. Dhatura is sometimes mixed with bhang to make it stronger; rarely with ganja. "Bhang massala" contains pepper, cucumber seeds, rose petals, kachni, and somp.

30. Generally in company, two or three or more. In the villages I have generally noticed that all the smokers of ganja of a muhalla get together. Bhang is drunk either in solitude or in company according to circumstances. No women smoke ganja except gosain women and prostitutes. Very few children smoke it. The same with bhang.

31. For ganja and bhang: very easily, with bad company and example. It is difficult to break off, but not so very difficult. A sentence of imprisonment for six months or so would break the habit. There is no marked tendency of the kind indicated.

32. There is no special custom as regards ganja. Bhang is generally drunk at the Holi and Sheoratri. It is, however, not essential to the observance of these festivals. It is not generally excessive.

33. It is looked on as a bad habit. Non-smokers look down on smokers. The reasons are—(1) waste of money; (2) it generally implies low company or running after women; (3) it seems to lead sometimes to asthma; (4) ganja

smokers become violent tempered. This does not apply to bhang with Marwaris. There is no worship of the hemp plant.

34. Yes; to sadhus and bairagis, who have to undergo hardship.

35. Yes, except in the case of sadhus and bairagis. There would be illicit consumption, but not much. The ganja shops should be closed, except at large cities, and there the sale should be restricted to sadhus and bairagis and doctors. I think there would be little discontent and no political danger. No doubt the consumption of country liquor will increase.

36. No.

39. Ganja smoking is worse than bhang drinking, or than eating or drinking any form of either drug.

40. Yes; they put ganja and bhang into various medicines, chiefly for debility. Ganja is used for a cattle disease, but I cannot remember for what particular one. It is given when they are suffering from over-work.

41. Bhang and majum are appetiser. Ganja is a substitute for food. It gives staying-power and protects from the effects of cold. I do not know it as a febrifuge.

43. They become quarrelsome, but not to a very great extent.

44. Ganja smoking produces intoxication at once. It allays hunger. Its effects last three or four hours. There is no subsequent headache, as in the case of liquor, but there is lassitude. There is uneasiness to the habitual consumer if he is deprived of his usual dose. Bhang does not intoxicate at once. It is an appetiser. Its effects are more lasting than in the case of ganja. There is some discomfort and lassitude after the intoxication is over.

45. Ganja smokers are generally thin, and have bad digestions and poor appetites. I have not noticed any evil mental or moral effects.

46. Habitual excessive consumers are liable to bronchitis, asthma, and dysentery. They are also lazy and stupid, but not necessarily debauched or immoral.

47. No.

48. The only danger is that the children will become consumers by force of example.

49. Yes; they are both used for this purpose. I do not think prostitutes use them for this purpose, though they do use them. Their use in this way is injurious. It tends to produce impotence.

50. The same applies to the excessive use of these drugs.

51. Many bad characters smoke ganja, but I do not think the moderate use of ganja has any connection with crime in general or with any special class of crime.

52. Same as above.

53. No; I think not.

54. Yes.

55. No.

56. Ganja and bhang are rendered stronger by the admixture of dhatura.

57. When ganja is pounded up seeds and all, and eaten mixed with sugar, it has a stronger intoxicating effect than when smoked.

68. Consumption on the premises should be prohibited, as has been done with advantage in the case of madak.

69. No new shops having been opened for years in my neighbourhood, I cannot say what is usually done. Local opinion ought certainly to be consulted.

70. A good deal of ganja smuggled from

Jaipur in Madras. I have had several cases to try myself. There is no supervision there. I do not, however, think that a great deal now escapes taxation. Most of the consignments are seized.

53. *Evidence of HARI HAR SINGH, Zamindar and Honorary Magistrate, Sambalpur District.*

3. It grows in Orissa and Ranchi districts, and chiefly in Ranchi district.

4. It is known by three names, viz., ganja, charas, and pati.

5. No one grows wild hemp. It grows spontaneously here and there. No conditions of soil and climate are necessary. It grows anywhere.

6. It is scattered at some places, and also dense at some places.

7. (a) No.

(b) No.

(c) No.

(d) No.

9. There is no cultivation of this in our district and I am therefore unable to give any particulars.

10. No, all classes of persons can cultivate hemp.

11. These plants have a different kind of seed. They are not raised from the seed of the wild hemp.

12. So far as I know, no one cultivates wild hemp. I cannot say anything about the male or female plants of such hemp.

13. It is restricted in our district. Formerly every one used to grow ganja here and there. The leasing out of monopoly was then not in force. Formerly the ganja monopoly was not leased out in our district. The people of all classes then used to grow it anywhere they pleased, without reference to the conditions of climate and soil, and consume it; but since the introduction of the system of leasing out of monopoly by Government no one cultivates it. Only water is to some extent necessary; but of this no limit is fixed in our district. Formerly the public used to grow ganja in many places in our district, for which only water was necessary without reference to the soil and air. The monopoly of ganja having been leased out, all the plants were cleared off by Government. The ganja cultivation has since then ceased in this district; nor does any one grow it. It can be grown everywhere. I do not think that there is any part where its cultivation would be impossible.

14. Formerly ganja and pati only were prepared and used in our part of the country. At present they are not prepared here.

(a) Ganja is prepared from hemp plants for smoking and drinking.

(b) It is not prepared or used in this part.

(c) Bhang (or pati) is prepared from hemp plants. It is pounded and mixed with water and used for drinking.

15. Formerly as ganja was cultivated in our part of the country, the people prepare only ganja, and from its leaves, pati or bhang; but wild hemp plants are not produced anywhere in our part of the country, nor are they even in use.

The cultivated ganja, too, is being supplied by Government, and used since the leasing out of monopoly has been brought into force.

16. The people pluck the leaves of the hemp plant and use them in their respective houses for drinking. The leaves and ganja of the hemp plant, wherever grown, are used. Ganja and charas are produced from the wild hemp.

17. All classes of people prepare ganja and pati, but no one prepares charas in this country. There is not even any particular class of people who prepare it.

18. If these three drugs (ganja, charas, and pati) are kept for a long time, first of all the bhang or pati loses its effect, and if it is kept with care for a long time, it can be of good effect for one year. If ganja is similarly kept, it cannot lose its effect for two years. As charas is not in use in this country, I cannot say after what length of time it loses its effect.

19. Ganja and charas both are used for smoking, and, in cases of certain diseases, ganja is mixed with other country medicines, and used as madak (or medicine). Ganja is pounded and mixed with water and used for drinking like pati. It is used for drinking, more especially in the Orissa country and for its medicinal quality, throughout India.

20. Ganja is used by almost all classes of people for smoking. It is used mostly by jogis and Vaishnavas. As charas is not obtainable in this country, it appears to be used very seldom. The ganja is used by the people of every class in almost all districts in India.

21. As only flat ganja is supplied to this district it is in use, but as round and chur ganja are not supplied, they are not in use. In what localities these kinds of ganja (round and chur) are in use I do not know.

22. As charas, native or foreign, is not in use in this country, I do not know whence it is imported.

23. Bhang or pati is not used for smoking.

24. All classes of people in India sometimes (a) eat, and sometimes (b) drink it.

25. Of ganja, charas, and bhang, the use of ganja and bhang is increasing day by day. The increase is owing to bad company, and to the fact that they are obtained at a small value and in large quantities, and produce intoxication in a short time.

29. (a) Higher classes of people in India.

(b) Jogis, Vaishnavas, and lower order people.

(c) People of higher and lower classes.

(d) When there is a party making an attack or reading "Bhagwat" (a sacred book), or where there assemble 10 or 15 ganja smokers, there will be found the excessive use of this drug, and when jogis and Vaishnavas assemble together at any shrine they use it in large quantities.

27. From jogis, Vaishnavas, and lower classes.

Some say that the intoxication from ganja has the effect of concentrating the mind, *i.e.*, the mind takes the same direction as the persons using it wishes. I therefore think that, as the jogis and Vaishnavas always wish to devote themselves towards God, with a fixed mind, they use it with that object: that some idlers among the lower class people use it with the object of diverting their mind from the household business; and that the men of business use it with the object of performing a large amount of their ordinary duties.

28. In this country six pice worth ganja is sufficient for a moderate consumer, and two annas for an excessive consumer.

29. (a) Ordinarily tobacco is mixed with the ganja for smoking.

(b) Some men, in order to get themselves more intoxicated, smoke ganja, having mixed dhatura seed and *keskar* (or pistil) of champa flower with it. The only article sold for being mixed with the ganja is tobacco.

30. It is used in large quantities in company and at conspicuous places. It is confined both to the male sex and to the grown up persons. It is not used by the children.

31. Yes; when by bad company it is used for some days. When the habit is formed, it is difficult to break it of, and it is natural for the moderate habit to gradually develop into the excessive.

32. It being the social custom among the jogis and Vaishnavas, they are in the habit of using it; but religion has no connection with it. In my opinion its use is not very essential. It is used throughout by some in moderation and by some in excess.

When the habit of using it is formed, it produces in some cases various kinds of diseases (such as lung and head diseases) in time.

33. These drugs are generally regarded as injurious. There is no opinion (social or religious) regarding it. As it injures the body and, owing to its narcotic quality, induces the consumers to commit other bad acts, it is hated. We hear that the people of Bikanir, Malacca, Siam, etc., and particularly Marwaris, worship this plant.

34. If they should suddenly give up its use, they may be attacked by various diseases, *i.e.*, they would not have sleep at night; joints, etc., of their bodies would ache; and sighing, swelling of belly, unsoundness of mind, indigestion, and continuous anger would follow. All these are generally produced by ganja, bhang, and charas.

35. If the use be prohibited at once, the consumers would be put to considerable difficulty. It would be improper to consume illicitly. If it is proposed to prohibit its use, first of all, the event of leasing out the monopoly shall have to be gradually lessened. If its use be prohibited at once, the consumers would, no doubt, be discontented, and consequently a political danger is likely to arise. Yes, the prohibition would be followed by recourse to alcoholic stimulants and other drugs; but as the jogis, Vaishnavas, and Brahmins in India hate liquor, and do not use other drugs, I think it would be difficult to have recourse to them at once.

36. I have heard that the lower class people, who use ganja, use alcoholic stimulants when ganja is not procurable, but what quantity they use I cannot say.

37. As charas is not in use in this part of the country, I am not in a position to explain the difference.

38. Only flat ganja is used in this part of the country; but as the round and chur ganja are not in use, I am unable to explain what different effects they have.

39. The smoking of ganja is less expensive than any other preparation.

40. The baid [or native physicians] of this part of the country use ganja on account of its medicinal quality. They also prescribe it, mixed with other medicines, in cases of bowel complaints of cows, etc.

41. It is observed in the baid Shaster that ganja is mixed with the medicines. So it appears to have some effect, because, had it not been the case, the baid would not have used it.

(a) The people say that ganja has some digestive effect, and those who use it say that they feel more appetite.

(b) In case of severe exertion or exposure relief can be obtained from ganja owing to its narcotic quality.

(c) We hear that in unhealthy tracts ganja is used in sufficient quantities.

The people of almost all classes generally use it for the above purposes.

42. Out of these drugs the moderate use of ganja is not likely to do any harm. As the Indian baid use ganja, having mixed it with medicines, it appears that its moderate use does not do any harm.

43. As the people of all classes are in the habit of using it (ganja) in our country, none of them are offensive to their neighbours or any one else.

44. The moderate use may affect the health of the habitual consumer, owing to its small degree of intoxication. It is refreshing. It produces intoxication. It does not allay hunger. It creates appetite. The effect lasts for three or four hours. The consumer feels unwell after the intoxication is over. Yes, the want of subsequent gratification produces longing and uneasiness, and so the body becomes unhealthy.

45. The habitual moderate use of this only deranges the mind, and does not produce any physical or moral injury. When the mind is deranged it injures the digestive power and causes loss of appetite.

It does not cause dysentery or bronchitis. It causes asthma in some cases in old age.

It impairs the moral sense, and induces laziness, habits of immorality and debauchery.

It deadens the intellect and produces insanity. When it produces insanity, he who is affected by it is always inclined to do what he is generally addicted to, but it is temporary. No symptoms of insanity appear as before if the drug is used after liberation from restraint. No one recommends that persons of unsound mind, who never use ganja, should use it. I would not recommend the use of ganja by persons suffering from mental anxiety or brain disease to obtain relief. The intellectual power of a man of weak intellect cannot be increased by the use of these drugs.

46. The habitual excessive use results in brain diseases and commission of thefts, dacoities, debaucheries, etc., and produces insanity.

47. It is not the custom to use ganja hereditarily; nor do I know that the use of it affects in any way the children of the moderate consumer.

49. Ganja and pati are used as medicine with the object of exciting the desire for sexual intercourse. They are also used by prostitutes with the same object. The use of an additional quantity by a person whilst being ordinarily intoxicated causes the person using it to be out of his senses. The excessive use of ganja may weaken the body.

50. The excessive use of all these drugs injures the body.

51. The ganja appears to be used mostly by badmashes. Its excessive use is likely to result in the commission of grave offences through stupidity.

52. The excessive use of any of these drugs may produce insanity, which is likely to result in the commission of grievous hurt, murder, etc.

53. Excessive indulgence in these drugs incites to various kinds of violent and unpremeditated crimes. I have personally seen certain cases of assault, grievous hurt, etc.

54. Yes.

55. Those who do not consider their own interest may, in order to further their designs, stupefy themselves. Stupefaction can be induced by excessive use, even without any admixture.

56. What the baidis use in moderation, though modified by the admixture of other substances, produces good effect, and, similarly, what they use in excess produces bad effect. Those desiring for more intoxication mix dhatura seed with ganja, etc., and some men, I hear, in order to commit theft of another's cloth, fulfil other bad desires, and stupefy others, administer ganja mixed with dhatura seed, etc.

57. The ganja is sometimes used mixed with country medicines as preventive of asthma and dysentery. Charas is not in use in our country.

58. The abkari administration is working properly. Any improvement of it would result in disadvantage, while to relax it might probably be advantageous.

60. In some of our adjoining Feudatory States no control has been maintained from the beginning. The system requires modification in this respect. If no modification is to be effected, the people may use as they please, and may commit bad acts.

61. Charas is not produced in our country. The control should be exercised where it is produced; otherwise, if the public be permitted to use it as they please, it may probably be dangerous in future.

62. Control should be maintained. This would be feasible for the Government. Gradual increase in price and proper arrangement may prevent the excessive use.

63. As it is sold at many places and at a small price the public easily use it. In my opinion the price should be gradually increased, and the sales at too many places stopped.

64. I have no objection about this.

65. If the duty on ganja, charas, and bhang be increased, as in the case of liquor, it is very possible that the people may reduce their consumption.

66. The duty on all kinds of ganja should be the same. The rate at which the ganja is now sold should be at first increased double, and then gradually.

67. The present rate of duty on ganja, charas, and bhang, if increased, would gradually reduce the consumption.

68. There are houses licensed for the sale of ganja, etc., in our province. I have no objection regarding them.

69. The people are not consulted in this matter. The ganja shops, etc., are opened at the places selected by Government of its own accord, and sales are effected under its orders.

70. If any one illicitly brings ganja, exceeding five tolas in quantity he is punished by Government. The duty is paid. There is no such drug as is used without being taxed.

54. *Evidence of BEHARI LAL, Banker and Honorary Magistrate, Jubbulpore.*

24. I came from Dehli and found that everybody, high or low, drinks bhang at the Shivaratri and Dewali festivals without the slightest censure or disapprobation. Bhang is also much drunk in the hot weather to neutralize the heat. Here—where there is little heat—there is little bhang consumed.

32. I am not aware of ganja being used in accordance with any religious or family custom.

33. There is a slight feeling of disapprobation among respectable natives against persons who smoke ganja even in moderation, but I believe this to be due to the fact that if any man is known to smoke ganja at all, his enemies say he is a great ganja smoker.

35. I think it would be inadvisable to try and put a stop to it altogether.

41. I believe the smoking of ganja in small quantities to be beneficial. I have made extensive inquiries on this subject during the last month. I believe that its use, for example, enables sadhus to endure extremes of cold and hunger, and that labourers taking it after their day's work obtain easy digestion and refreshing sleep from it. I call moderate smoking a consumption of under 2 pice a day.

53. I have never had personal experience of any person committing violent crime or becoming mad in consequence of the use or abuse of ganja.

65. I consider the price of ganja as it is now, 2 annas a tola, to be quite high enough. I should deprecate any rise in the duty.

55. *Evidence of RAJA SETH GOKAL DAS, Banker and Landowner, Jubbulpore.*

20. I estimate roughly that 75 per cent. of the people take ganja in some form or another.

35. I do not anticipate that ganja smokers deprived of the drug would have recourse either to opium or to liquor.

45. I am of opinion that ganja smoking is an injurious habit. It is a widely spread one, and is not confined to any special classes or

sects, although gosains are specially addicted to it. I have never known a case in which ganja smoking has ended in madness or violent crime, but I have known many cases in which health has been injured or destroyed.

65. I should recommend an increased duty on the drug, so as to bring it beyond the means of a larger number of the people.

56. *Evidence of RAI BAHADUR SETH TIKA RAM, Brahmin, Money-lender and Malguzar, Narsinghpur.*

1. By personal observation of the condition of the consumers of the drugs in this (Narsinghpur) district and by hearing about them.

2. Ganja is not cultivated since the last fifteen or sixteen years in this district. Ganja and Indori bhang are imported. The former is brought from Khandwa.

10. It is not cultivated in this district.

13. The cultivation of ganja has been prohibited by Government since the year 1878 in this district.

14 and 16. They are not prepared in this district.

19. Ganja is used only for smoking in this district, and occasionally, when it is necessary to do so, it is administered as medicine after being mixed with other things.

Charas is neither imported nor used in this district.

20. Twenty per cent. of the lower classes of people, and 5 per cent. of the middling classes of people may be said to smoke ganja in this district.

Charas is neither imported nor used in this district.

21. Only the Khandwa ganja is imported and used in this district. No other ganja is imported.

22. No kind of charas is imported or used in this district.

23. Bhang is not used for smoking in this district.

24. Bhang is very rarely used in this district. The number of habitual eaters and drinkers among the middling classes of people may ordinarily be 2 per cent., and of the latter in the hot weather 5 per cent.

25. The smoking of ganja appears to be somewhat on the increase in this district. Some of the non-consumers even begin to smoke by the company of consumers, when they are in communication with the latter.

26. The number among the lower and middling classes of people—

(a) of habitual moderate consumers of ganja is 10 per cent.;

(b) of habitual excessive consumers of ganja is 5 per cent.;

(c) of occasional moderate consumers of ganja is 5 per cent.;

(d) of occasional excessive consumers of ganja is 5 per cent.

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The number of habitual and occasional moderate consumers of bhang among the middling classes of people is 2 and 5 per cent., respectively.

27. Consumers of ganja among the lower classes of people are 20 per cent. Consumers of ganja among the middling classes of people are 5 per cent.

Habitual drinkers of bhang among the middling classes of people are 2 per cent. Habitual drinkers of bhang among the middling classes of people in the hot weather are 5 per cent.

28. A habitual moderate consumer of ganja may be using 6 pies worth of ganja daily, and an excessive consumer of the drug over one anna worth of it. A habitual moderate drinker of bhang may be using 3 pies worth of bhang daily and an excessive drinker about 6 pies worth of it.

29. No ingredient other than tobacco is mixed with ganja. Some people mix anise seed, white succory, cardamoms, almonds, sugar, etc., with bhang before they use it, but no dhatura is mixed, and if it is done so by any one, it may be for the purpose of producing senselessness or causing an excessive intoxication.

30. As a rule the consumption of ganja is practised in solitude, and ganja about two mashas and bhang three to six mashas in weight are used at a time. If there be one or two companions, ganja three or four mashas and bhang at the rate of three mashas for every person, and in the case of excessive drinkers six mashas are used. The use of ganja and bhang is specially confined to the male sex. No children consume them. On coming of age, however, they begin to use them at any time of their life they please.

31. The habit of using the drugs is easily contracted by keeping communication with a consumer. It is somewhat difficult to shake it off. By constant use the habit gets strengthened, i.e., a consumer commences to use the drugs in larger quantities.

32. There appears to be no social or religious custom.

33. The use of every intoxicating drug is considered to be bad. The opinion of the common public as well as my own opinion is that the use of such drugs is disgraceful to the people generally and especially to those who deal in money or business of any kind. There is no custom of worshipping bhang plants in this district.

34. Undoubtedly it is difficult to give up the use of ganja and bhang. But the persons who use them in smaller quantities and not from long time will find it less difficult to do so than those who have been long accustomed to them and use them in larger quantities. The number of such

consumers of ganja and bhang is 15 and 2 per cent, respectively.

35. It is not an easy matter to prohibit the habitual consumers specially of ganja and bhang from using these drugs. Such prohibition will lead to the illicit use of the drugs, and will be very much disliked by the consumers. There is to wonder that it may cause a disturbance. If the prohibition is ordered, it will not be within the reach of every consumer to use liquor or any other intoxicant as a substitute for ganja.

36. The use of alcohol in substitution of these drugs is not a matter that is heard of in this district. Perhaps it may have been done by any one in any other place.

37. Charas is not smoked in this district.

38. No ganja from any place other than Khandwa is imported into this district.

40. Sometimes ganja and bhang are used for medicinal purposes. They are also used in medicines for animals. But their use as medicine has not given rise to the custom of their being used as intoxicants.

41. (a) The moderate use of ganja and bhang encourages appetite and helps digestion in the beginning; but the effect does not continue.

(b) The moderate use of ganja and bhang at intervals gives staying-power so long as there is intoxication and alleviates fatigue. But it is not the case when the intoxication is over.

(c) They do not serve as a preventative of fever or any other disease.

(d) In no way they are beneficial.

There is no particular caste of persons who are addicted to the use of these drugs. In every caste the persons who are ignorant or those who associate with such persons take to them, looking to the immediate advantages as noted above. After a few days' use, however, they become accustomed

to them and begin to use them in larger quantities. Afterwards they find it difficult to give them up.

42. The use of any intoxicating drug, even in a moderate quantity, is not beneficial but injurious.

43. Some of the moderate consumers even cause trouble to their neighbours by picking quarrels with them.

44. Ganja and bhang have their immediate effects. They are refreshing so long as there is intoxication. They relieve one from hunger in the beginning, but it is felt afterwards. The intoxication lasts for nearly three or four hours. There is uneasiness if a consumer does not use them.

45. Ganja-smoking causes cough. It has a deleterious effect on the brain, and so bhang has.

46. *Vide* reply against question No. 45.

47. It does not appear to be hereditary or to affect the children of the consumer.

48. *Vide* reply against question No. 47.

51. The number of consumers among the bad-mashes does not seem to be a large one.

52. As above.

55. It has been now and then heard that offenders, in order to gain their object, make the person whom they wish to offend smoke ganja or bhang with them. One who never uses these drugs naturally becomes somewhat senseless by smoking or eating them in large quantities.

56. When the persons who are habitual excessive consumers of ganja do not get the drug in sufficient quantities, they use some dhatura with it, so that they may be intoxicated. But as they are accustomed to it, they do not become senseless. A person who is not habituated to it becomes senseless if he smokes dhatura with ganja.

57. Sometimes the use of ganja does not seem to cause injury to any great extent.

57. Evidence of DIWAN PREM SINGH, Zamindar, Bilaspur District.

1. I have lived from my birth in the Bilaspur district.

2. I know all the terms described in this question, except siddhi. They are all well known in these provinces.

3. In the district of Ranchi, in Sarguja, it grows wild very abundantly. It grows freely in Khandwa and Rajshahi, in Bengal, also Patiala and Bahraich, in Oudh.

4. I know no other terms except bhang, charas, and ganja. A kind of flat ganja is known as "traloncha." These are all products of one and the same plant.

5. It grows everywhere except on retli, panhar, and patreh soil. It requires an average rainfall.

6. It grows densely.

7. In Nagpur and Khandwa. It is not grown in the feudatories, as it is forbidden by law. Its fibre or seeds are not used for any purpose.

8. The area under cultivation has greatly decreased owing to the restrictions placed upon it by the Government.

10. No special caste. Those who smoked ganja used to cultivate it for themselves.

11. Yes, but the plant improves by cultivation.

13. In Nagpur and Khandwa.

14. Only bhang and ganja are prepared in Nagpur and Khandwa, not charas.

15. For the production of ganja the tops of the plant are broken or twisted to prevent flowering. Bhang is the product of the full flower. Ganja is rubbed in the palm of the hand with tobacco and a little water, and then smoked. Bhang is drunk and eaten, but never smoked.

16. Bhang is prepared by people in their houses. It can be prepared from the hemp plant wherever grown, and so can ganja and charas.

17. Every one makes their own.

18. With ordinary care it lasts for two years. It is tied up in grass and straw in a dry place. It is spoiled by cold and damp.

19. Ganja and charas are only smoked.

20. No one smokes charas in Bilaspur. It is only used in cold places.

Sadhus and the common people are the ordinary users of ganja, both Muhammadans and Hindus.

21. Flat ganja is the best, then round, then chur.

22. Charas is imported from the North-Western Provinces.

23. Bhang is never smoked.

24. The wealthier classes use bhang. Bhang is not much affected in this district. Sadhus use both bhang and ganja. Wrestlers use bhang. They consider it useful to enable them to stand the excessive exertion. It is much used by the people of Muttra and Brindaban.

25. The use of ganja and bhang is on the increase, partly owing to the increase in population, and partly to the increased prosperity of the people. Ganja and bhang are dearer than they used to be.

26. Habitual moderate consumers are far the greatest in number. I am unable to give exact proportions.

27. Sadhus, for purposes of devotion, and labourers who have to undergo severe labour; but the use of ganja in moderation is very common among all classes.

28. *Ganja*. (a) From half tola to a tola; cost from one anna to two annas.

(b) Double this.

(a) *Bhang*. Two tolas, cost one anna.

(b) Double this.

Bhang is really more expensive on account of the ingredients necessary for its use.

29. With ganja is mixed tobacco and water. Sadhus and excessive smokers of ganja on exceptional occasions mix dhatura with the ganja. Dhatura being cheap, intoxication can be produced more cheaply if it is admixed. With bhang are mixed kasni, saunp, black pepper, dhaniya, cardamoms, cucumber seed, sugar, khus-khus, kabab-chini. In the rains almonds and ajwain and milk are especially mixed with bhang. At other times it is taken with water.

30. Habitual consumers take the drugs in solitude. The ordinary smoker prefers to take it in society. Children never take these drugs. They are never consumed before maturity.

31. The habit of smoking ganja is more easily acquired than that of smoking bhang. The ordinary consumer would find no difficulty in breaking the habit; the excessive consumer would.

32. At the Shivaratri festival it is offered to Shiva. At other times it is offered in performance of a vow. On no other occasions is it obligatory. It is handed round at assemblies and meetings. At the Holi, bhang and ganja are much used, but are not obligatory. The use at these festivals does no harm. There are many persons who only use these drugs at these festivals, but they do not last long enough to develop a habit.

33. The term "ganjeri" is certainly one which carries contempt with it. There is no general public opinion against moderate smoking, but a man is considered generally a better man who does not use the drugs at all. Parents do their best to prevent their sons using them at all. Ganja is considered far more harmful than bhang. I have never seen bhang or ganja worshipped.

34. The sadhus would feel the privation very much, and would feel it an interference with their religion. It would be a far greater hardship to the people to forego opium than to forego ganja or bhang, but in my opinion more harm is caused by opium than by these drugs.

35. I think it would be inadvisable to put a stop to ganja or bhang. It would be illicitly consumed, and there would be general discontent. The lower castes would take to drinking liquor instead. But the higher castes, Brahmans, sadhus, and Chattris would have no alternative.

36. I do not think alcohol has yet been substituted for drugs.

37. I know nothing about charas except by hearsay. Its effects are stronger than those of ganja.

38. Chur is less powerful than the flat or round ganja.

39. The same drug is never smoked and drunk or eaten.

40. The ganja is given as a drug for men and animals in affections of the stomach. Bhang is also given as medicine for diarrhoea. It is given in cholera.

41. There can be very little or any benefit from ganja. There is undoubtedly benefit from bhang. Bhang is useful as a digestive. Ganja is of no use for digestion. Ganja destroys the appetite; bhang excites the appetite.

Bhang is useful for supporting severe exertion; ganja also serves this purpose to a less degree. It is in no way a cheap substitute for food; but soothes fatigue. The poor never use it as a substitute for food. Neither are of any use in exposure, nor as a febrifuge. Wrestlers use bhang with a view to supporting severe exertion.

42. Bhang moderately consumed is undoubtedly useful. A moderate use of ganja is not harmful to any appreciable degree, but its use may easily become immoderate.

43. Yes.

44. It is refreshing and resting. It only produces intoxication if used in excess. Appetite is checked by ganja and charas; created by bhang. The effects of ganja lasts one hour; bhang, two hours; charas, two hours. There are no immediate after-effects. The want of gratification of the appetite for these drugs produces uneasiness and lassitude.

45. Charas injures the constitution. There are no serious effects from the use of charas and bhang. They cause bronchitis, not asthma. A moderate use of these drugs does not lead to laziness or immorality. I never saw a man permanently insane from their use. The immediate effects of immoderate use are stupidity and insensibility, not violence in any way. One case I have seen is an exception to this, in which a boy, not used to ganja, killed his father while in intoxication from it.

47 and 48. The habit is not hereditary.

49. I never heard of the drugs being used as an aphrodisiac. The sadhus use it to check their passions. It does not produce impotence.

51. Ganja smokers are apt to fall into bad company, and so get into criminal ways. I do not think the use of these drugs conduces to crimes of passion. It leads to crimes of violence at times, as I have myself seen, but only when used by persons not used to them.

53. I have seen a boy, not used to ganja, on becoming intoxicated with it, kill his father in a fit of frenzy. I have no experience of any other crime being committed after its use.

54. Criminals do use these drugs for this purpose to fortify themselves.

55. Yes, but I have no personal experience of such a case.

57. They are never eaten or drunk.

58. Efforts should be directed towards reducing the number of consumers.

59. I can suggest no improvements.

60. It is sufficiently controlled.

62. The use of bhang should be encouraged.

63. I approve of the system of wholesale, as it is a valuable check in consumption.

65. There is disproportion between the tax on drugs and liquor. The production of liquor entails far greater labour, and on the whole, however, I think it is a good thing that drugs are heavily taxed.

66. Flat and round ganja should be more heavily taxed than chur.

69. This should be done more than it is.

70. Smuggling is carried on, but not generally.

56. Evidence of LALL UMED SINGH, Zamindar, Bilaspur District.

1. Ganja and bhang are the produce of one and the same plant. Ganja is prepared from the leaves, bhang from the buds. Local bhang, that is bhang prepared in Khandwa, is considered inferior to bhang imported from the North-Western Provinces, especially from the Mattra district. Such bhang is called "dudhia bhang." This is only obtainable in these provinces through friends living in other parts of India.

2. I know the term chur as applied to ganja. It means broken ganja. I know flat ganja, but never heard of round ganja. Charas is the juice which exudes from the buds of the living plant. What remains of the buds is ganja.

3. I know it grows spontaneously in the Sargooja estate, which borders on my zamindari. There is no prohibition against ganja growing there. It grows freely in all foreign States. In Sargooja every house has a plantation of ten or twenty trees in the compound, and besides this there are fields of it, but it is mostly grown in small patches round the houses.

4. I know two kinds of ganja, one *burija* another *baloucha*. Special care is taken in the preparation of these forms of ganja, which are stronger than the ordinary. Slits are made in the living plant, and preparations, such as dhatura, put into it. The plant is the same.

5. I have never seen any wild ganja nor heard of it, though I have large tracts of forests in my zamindari.

7. Ganja, charas and bhang are regularly grown and prepared in foreign States of the Central Provinces. They are grown and prepared in Nagpur and Khandwa. I never heard of rope being made from its fibre. Its seeds are useless.

9. At the end of June the seeds are thickly sown over a small space. When the plants are about nine inches high, they are transplanted on to ploughed and manured land at a distance of two or three feet from each other. They are weeded twice or thrice and manured. When the plants are grown, the tops are cut and the branches are twisted to prevent flowering. When the buds are formed, the trees are cut down and well pressed. The buds are then collected. The ordinary leaves are used for bhang. Charas is collected before the plants reach the stage at which they are ready to produce ganja. It is collected by men who walk through the fields clothed in leathern coats. The charas exudes from the plants, and is collected in the clothes.

10. They are ordinary cultivators, but belong especially to the caste of Kachis.

13. It is restricted to Nagpur and Khandwa. I know of no special conditions for its growth. It is a hardy plant, and grows everywhere.

15. Ganja is only smoked in chillums or leave *chungis*. Two-thirds ganja are put with one-third tobacco. It is never smoked alone. A few drops of water are put with it. It is never drunk. Bhang is never smoked—only eaten and drunk. It is mixed generally with other things, but is also eaten and drunk alone.

16. In this district there is only one licensed vendor who has shops at Bilaspur and the two tahsil head-quarters, Jahangir and Sheonarayan. It is not much consumed, and only by high caste and wealthy people. It is not palatable without expensive admixtures, such as sugar, pepper, etc.

Bhang is always prepared privately, the raw material alone being purchased from the contractor.

17. Every one prepares his own according to his own tastes. Charas is hardly used at all in this district.

18. I can speak of ganja and bhang. They keep for about a year. After that it begins to lose its strength. Cold causes it to deteriorate.

19. Only used for smoking.

20. No one uses charas in this district. There are two classes of Chhattisgarhi Chamars—one who do not smoke ganja, the other who do. Ganja is freely smoked by all classes, but especially by sadhus, baragis, and labourers. It is supposed to conduce to religious abstraction in the case of the former. Cartmen are especially addicted to its use. Bhang is only used by the wealthier classes, and is supposed to have been introduced into these provinces from the North-Western Provinces.

22. No charas is used in this district.

23. Never.

24. Eating bhang in pills is cheaper than drinking it, as it does not require so many ingredients. Habitual consumers generally eat it. Muhammadans never touch it. Muhammadans use ganja also to a small extent. Madak is what they mostly use. It is taken in the early morning, at mid-day, and in the evening, irrespectively of meals.

25. There is an increase in the consumption of ganja. The use of bhang is on the decrease. Bhang is only used in the hot weather.

In my opinion the taste for ganja, opium and intoxicating liquor is perfectly distinct, and when once the taste for one of them has been acquired, its use cannot easily be abandoned in favour of another form of intoxicant. I do not believe that a rise in the price of liquor would drive liquor consumers to the use of ganja, though persons who had never taken to any form of intoxicant might choose, perhaps, the cheaper form. The use of opium and madak are on the decrease. Their cost is more than that of ganja.

27. Occasional excess is much more frequent in the case of bhang than of ganja. Bhang is frequently used at festivals by persons who otherwise never touch it. Out of 1,000 typical persons in this district, 700 would never touch any kind of drug. Bhang is *very* seldom habitually consumed in this district. I should not think there are more than 50 or 60 habitual consumers, and they are foreigners. Ganja is never consumed occasionally. The craving must be satisfied every day. The use of bhang is generally stopped in the cold weather and rains. In my opinion, there is very little excess in these drugs in this district. There is not the same violent intoxication that results from liquor. I have not seen a man insensible from bhang or ganja more than six or eight times in my life. Sadhus and bairagis are habitual smokers of ganja. They frequently mix intoxicating ingredients. Labouring classes use ganja moderately habitually. Only one or two per cent. of Gaontias and Malguzars would use ganja habitually. There is practically no harm done by bhang.

28.

Bhang	Ganja.
(a) 2 tolas	$\frac{1}{4}$ tola.
(b) 1 chittack to 2 chittacks	$\frac{1}{2}$ tola.

29. Tobacco is always mixed with ganja; charas is also mixed with it, and also dhatura and kuchla, especially by the sadhus.

With bhang is mixed kasni, saump, black pepper, dhaniya, rose petals, cucumber seed, khas-khas, cardamoms, almonds, sugar, kesar. When drunk, it is mixed with milk or water.

30. Bhang is used at festivals. Sadhus smoke in solitude. Ganja smokers invariably smoke in company, if possible. The practice is never commenced before sixteen. His father and mother smack a boy who tries to smoke before this. Female sadhus smoke. Female coolies do not smoke ganja. No respectable women smoke ganja, but now and then they drink bhang. This would be in solitude.

Opium, but not these drugs, is given to children.

31. The habit of bhang eating is not easily acquired. Ganja smoking is very easily acquired, and its use does not, in my opinion, easily develop into the excessive.

32. At the Holi festival, a special form of bhang is used called majum. It is sugar and water with bhang and *masala* in it. It is eaten as a sweetmeat. Bhang is also used at the Shivratri festival. Its use is not essential to any festival. There is no special custom among the Gonds, who prefer liquor. There are no social customs connected with ganja or bhang.

33. The term *ganjeri* (a ganja smoker) is equivalent to a loafer. I do not believe the theory that ganja or bhang can habitually supply the place of food for a poor man. It gives him strength for a short time, but a reaction sets in. It renders him liable to cold and bronchitis. Its use is in bad repute, because the craving to go and smoke with his fellows make a man idle and dishonest. Its use clouds the brain. I believe opium to be of use if used in moderation. I believe all use of ganja and bhang to be harmful.

34. Ganja consumers could not stop its use without great privation. To forego bhang would be privation for only the very insignificant percentage of habitual drinkers.

35. It would be a good thing for bhang and ganja smokers to be driven to liquor, as these are not harmful to the same degree.

26. Drinking is more or less a matter of castes. Certain castes drink. Those that do not are not likely to take to it. Liquor drinkers never consume bhang; they do ganja, but only to a very small extent.

39. Bhang is by far the least injurious of all preparations of the hemp plant.

40. Ganja is burnt and rubbed into the body with oil. I never heard of it being prescribed as an internal medicine. Never saw it used for cattle diseases.

41. I never heard that the use of these drugs or of opium was a prophylactic against fever; though they might be of use, if used for the first time when fever came on.

Bhang is useful as a digestive. It is used for this purpose in medicine. Neither ganja nor bhang are any real use for severe exertion, exposure or fatigue. Opium may be some use in the case of exposure or fatigue.

42. Ganja is absolutely pernicious. A moderate use of bhang is not so harmful. The habit can be more easily broken off.

43. Yes.

44. The first effects are rest and warmth. The will loses its strength. The subject gets hungry and thirsty. Then the body gets cold, and the man becomes lifeless as earth, listless and careless of life.

A man deprived of ganja or bhang does not suffer anything like so much or so long as when deprived of opium.

45. It causes cold, bronchitis, and cough.

I have never known a man become insane from the use of the drugs.

They become silly for a short time, but the effect wears off with the drug. The brain is undoubtedly affected. There is no one in my zamindari commonly pointed out as a victim of bhang or ganja smoking.

46. Men frequently take to ganja and bhang drinking to stimulate the passions. The immediate effect is to stimulate the passion. This leads to immorality; but the effects soon wear off and leaves the man impotent.

47. The habit is not hereditary.

49. Prostitutes do use ganja.

51. It undoubtedly blunts the moral sense. I have never seen a case of violence or rape when under influence of ganja or bhang. It leads to gambling.

53. No.

54. Criminals do fortify themselves with bhang or ganja.

58. I have nothing to suggest. These drugs undoubtedly have a bad effect on the character, health, and the purse of the people, and therefore any arrangement for checking it within reasonable limits will be good.

60. The strength of ganja would be much increased if the charas were not extracted from the plant before it comes into the market. For this reason the Sargooja ganja is much better than ours.

61. I think it is sufficiently controlled.

63. No, except that too much profit goes to the wholesale vendors, thus putting a heavy burden on the consumers. It would be better if Government would deal straight with the retail vendor.

64. No.

65. The drugs are more heavily taxed than liquor, which is a good thing. I do not propose any alterations. The difference in price between drugs and liquor is hard on the castes that do not drink. The effects of ganja go off much more rapidly than those of liquor or opium.

66. The various kinds should be separately taxed. Chur should be taxed half as heavily as the other kinds, as it is much weaker. Old ganja should also be lightly taxed.

67. The contracts should be let out directly to the retail vendor. The wholesale vendor should be eliminated.

68. No, and I am glad there are not.

69. The authorities should consult the public more than they do at present.

70. There is a great deal of smuggling from the neighbouring foreign States.

Oral evidence.

Question 7.—The production I refer to is in States foreign to the Central Provinces, not in the Chhattisgarh Feudatory States.

Question 29.—Charas is not used in the Central Provinces. It only comes in rarely. The dhatura seeds are used only when greater intoxication is

required. The leaves are not used except when the seeds are not obtainable. Arsenic and jowari root are not mixed to my knowledge.

Question 33.—I think the use of ganja or charas to any extent, but not necessarily bhang.

Question 35.—My opinion is that liquor is less injurious than ganja; but I do not think that of opium. There must have been some mistake or misunderstanding. I think that opium smoking is much worse than ganja.

Question 41.—The ganja does not really give any advantage or strength against fatigue. It only makes people think they are benefited by exciting them.

Question 45.—I know of no case of insanity from hemp drugs. Intoxication produces temporary alienation of mind, but it passes off. No insanity is produced. The use of ganja weakens the blood and makes men weak and wanting in character.

Question 59.—I cannot say what scheme should be adopted to reduce consumption. If I had time to think it out, I should be able to suggest a plan. I have drunk bhang myself, but have never taken ganja or liquor. I have taken bhang only once or twice.

Question 66.—Chur is sold in the bazar. It is about half the strength of ganja.

59. Evidence of LALL NROOPRAJ SINGH, Chatriya, Zamindar of Barpali, District Sambalpur.

1. As being the Zamindar of Barpali, I know something very generally about ganja, as the State has to procure it for the consumers.

2. I do not know of siddhi and charas: your definition of ganja applies in my State.

3. Spontaneous growth unknown.

4. I do not know any other names than pati ganja and kali ganja. They are, respectively, the leaves and flower tops of one and the same plant.

6. Scattered.

7. There is no cultivation of ganja in my State.

8. As there is no cultivation of ganja in my State, no area increased or decreased.

10. The consumers were the producers, and hence there could be no restriction of the classes which produced.

11. Generally from preserved seeds from cultivated plants; sometimes from the seeds of the wild hemp.

12. There is no difference between the wild and the cultivated ganja. I know nothing more about it.

13. There is no restriction of district, for the raising is common to all districts. No special physical conditions needed for production.

14. Ganja alone was formerly prepared for personal consumption by consumers themselves. At houses of the consumers as much as needed for themselves. I never had estimates of the quantity.

16. Ganja may be prepared from the wild plants wherever grown.

19. Ganja is smoked only. Medical uses are not unknown. I do not know about charas and bhang.

20. The lower class people alone smoke ganja. The proportion may be 8 or 10 per cent. everywhere in the State.

21. The flat variety preferred everywhere.

22. Charas is not used here.

23. Bhang is not used for smoking.

24. Bhang not used here.

25. The use of ganja is on the increase. The licensed vending facilitates it.

26. I know nothing.

27. The ganja consumers are generally Bhooyas, Gandas and Kols, etc. I could not specify any habits in them that would lead to the use.

28. (a) Half a tola $\frac{1}{2}$ pice.

(b) Two tolas 2 pice.

29. I do not know of any admixtures.

30. The majority smoke in solitude. The males alone smoke ganja. No children smoke ganja.

31. I know nothing of the formation of habit. Difficult to break off. The moderation lapses into excess easily.

32. No religious or social ceremonies enjoin the essential use of ganja as far as I know.

33. The public regard the smoking of ganja with unmixed contempt. The disrepute is due to the loss of mental powers that the use brings on in the case of the drugs of the hemp plant.

34. The abstinence from ganja would entail diseases on the habitual consumers.

35. I do not think it possible to prohibit the use of ganja in my State. The confirmed smokers of ganja, I should think, will no doubt have recourse either to illicit consumption or to other drugs. If the prohibition is at all to be enforced, the only way possible for it is to disallow licensed

vending and to place the consumers under police surveillance and sanction. The consumers will be seriously discontented. Political danger might follow the prohibition. Probably the consumers of ganja will take to other narcotics ; which they may be I cannot specify.

40. Ganja has medical uses in the country medical books and is prescribed by native physicians. Ganja is used in the treatment of cattle.

47 and 48. The use of ganja does not appear to be hereditary nor to affect the children of the moderate consumers.

58. The administration of excise in my State is the best I could devise.

59. No improvement suggests itself to me.

60. No ganja is produced in my State at present.

61. No charas used here.

62. No bhang used.

63. No objection.

64. No objection.

65. (a) Reasonable.

(b) Reasonable.

66. Different sorts of ganja should be differently taxed, according to their intoxicating properties, the more intoxicating ones being taxed more heavily.

67. No objections.

68. No licensed shops where ganja could be consumed on the premises. Such houses would not be possible in view of the habit of the consumers of smoking wherever they like as tobacco is smoked.

69. The wishes of the people are not consulted before opening a shop, and a shop is opened in a place the people of which are known to smoke ganja. This is in fact considering the wishes of some of the people. Local public opinion should no doubt be invited and considered.

70. I do not import ganja from any Native State: all the ganja used here is imported from the Sambalpur Government Stores. Duty is paid ultimately by the consumers as vending is licensed at the first. Untaxed drugs are not in general use in my State.

60. Evidence * of PANDIT NARAYAN RAO GOBIND, Brahmin, Zamindar, Hurda.

1. I have had occasion to talk with some ganja-smokers and persons addicted to bhang-drinking and I have generally met with majum-eaters during the Holi days and persons who take bhang in the hot season. The sadhus, bairagis and gosains who generally use bhang and ganja have also added to the number of my informants regarding the matters connected with the hemp drugs.

2. The ganja sold in the market by the contractor is of three varieties. The flat ganja is called kali, the round one is termed only ganja, and the chur is named bhang, but this is not the real bhang, which is of two kinds, sadi and dudhia. Bhang is also called buti, bhangakha and bijya respectively.

3, 4, 5 and 6. I do not know this.

7. There is no cultivation of the hemp plant in the Hoshangabad district, but it is carried on in the Nimar district—

(a) for production of ganja;

(b) for use as bhang ; and

(c) for its seeds.

8 and 9. I do not know this.

10. The agricultural cultivators and the malies can undertake this cultivation.

11 and 12. I do not know this.

13. The cultivation of hemp plant for ganja is forbidden in the Hoshangabad district, but why it has been restricted is not known to me. Ganja can be produced in this district. The fact as to where its cultivation would be impossible can only be ascertained when the cultivation is given a trial and results in failure.

14. In the Nimar district they produce ganja from the hemp plant and term its chur as bhang, but this is not real bhang.

15. I do not know this.

16. The real bhang is not prepared in this district. The other portion of this question I cannot answer.

17. I do not know this.

18. They do not use charas here, and therefore I do not know the particulars connected with that drug. Ganja and bhang keep good with ordinary care for about a year. They smell bad after that period. They do not quite lose their effect but their strength is reduced. If they are carefully preserved in a box, their deterioration can be prevented for a period of five years.

19. Ganja is generally used for smoking. It is also required for certain medicines. It is not otherwise eaten. I do not know the particulars connected with the charas drug.

20. The use of ganja is not prohibited among any classes of people excepting the Bohras and Parsis. The people who use ganja are not regarded with respectability, and therefore its use is generally made in secrecy. The correct proportion of the ganja-smokers cannot be drawn. In these provinces they average about 5 per cent. of the population.

21. They prefer flat ganja termed kali or baluchur.

22. I do not know this, as charas is not imported in these provinces.

23. In these provinces bhang is not used for smoking.

24. Generally the Brahmans residing in places of pilgrimage, viz., Benares, Ujjain, Mathra, Allahabad, Kanhpur, etc., and in Malwa and Bengal are addicted to use bhang. In the hot season the mahajans drink bhang and some people eat the drug as *churan*.

25. The use of ganja is on the increase and that of bhang is decreasing. Bhang is taken as a luxury, but as it sells dear, its use has decreased. The reason why the use of the ganja is increasing is that the labourers find it a necessity.

26. I do not know this.

27. It does not depend upon any particular class of the people, but low-paid labourers, and the gosains and bairagis who always keep travelling are, owing to the effect of society, taken to this intoxication.

28. I do not know this.

29. While smoking ganja they mix tobacco with it to improve its taste. Dhatura is not mixed. Bhang massala is neither prepared nor sold in this district.

30. They smoke ganja in the presence of persons who are addicted to its use and avoid the presence of those who do not smoke it. Those who drink bhang do not take any such precaution; rather they take delight in drinking it in company. Generally its consumption is confined to the male sex and children are not allowed to use it.

31. The habit is easily formed on account of the effects of society, and to break it off is attended by temporary discomfort, which if one cares to undergo, the habit breaks off. It depends upon the habit of a moderate user to develop into the excessive.

32. None of these drugs bears any connection with religion, caste or custom. They are only taken for intoxication. After a short use it becomes a habit to smoke ganja which results in producing foam and reducing the blood. The use of bhang produces flatulence.

33. The respectable class of people regard the intoxication of ganja as very bad. Its use has no connection with religion. It is liked only by bairagis, gosains and sadhus, who profess to have left all worldly cares, and the labouring classes, who are under the impression that by smoking ganja they will be relieved of their worry. There is no custom of worshipping the hemp plant in this district. It is not advisable to drink bhang, but people take delight in doing so.

34. It would not be a serious privation to any class of consumers to forego the consumption of the drug they use. I cannot guess the probable number of each class of consumers.

35. It is possible to prohibit the use of all these drugs. If it is gradually reduced, the consumers can after some time forego the consumption of their favourite drug. If it is prohibited all at once, the ganja-smokers would find it very inconvenient, and they will adopt any measure, however bad it may be, whereby they could expect to get the drug. It is not advisable to replace the ganja by any other intoxicating stimulant, for all intoxicating things are bad. The prohibition would certainly create discontent among the consumers, but not to such an extent as to amount to a political danger. The entire prohibition of ganja would be beneficial to all classes of people excepting the sadhus, bairagis, gosains, etc., who consider this drug even more indispensable than food itself, and as they are always travelling, the use of ganja prevents the effects of the changing climates on their constitution.

36. I do not know this.

37. They do not smoke charas in this district, hence I cannot state the difference.

38. The flat ganja (kali or baluchur) produces more intoxication than the other two preparations. The round ganja possesses a greater degree of intoxication than chur.

39. They don't use bhang for smoking. Ganja is so used, and the chur is both used for smoking and drinking. The use of ganja for smoking is very injurious as is evidenced by the effects

produced on the smokers, many of whom become insane, and others are reduced in health owing to loss of blood.

40. In "Granth Raj Nighant" and "Gadnawaran" the authors have described the medicinal qualities of bhang, which is mixed with several native medicines, and the chur and bhang form also an ingredient of the cattle or horse massala.

41. I do not know about charas, but the moderate use of ganja or bhang is beneficial in its effects, as detailed below:—

Bhang (a) as a food accessory and digestive.

Ganja (b) as giving staying—power under severe exertion or exposure.

Bhang. As alleviating fatigue. (c) as a febrifuge or preventive of disease in malarious and unhealthy tracts.

Do. (d) As an ingredient of the cattle massala and other medicines.

My answer in regard to (a) and (b) refers to both the habitual as well as occasional use; that in regard to (c) and (d) refers to only occasional use. All classes of people can be found who use the drug for the purposes stated under heads (a) to (d).

43. Moderate consumers of bhang and ganja are inoffensive to their neighbours.

44. Ganja-smoking produces immediate intoxication, which lasts for about three hours. Bhang creates appetite. Its effect also lasts for three hours, after which it makes the consumer inactive.

47. It does not affect in any way the children of the moderate consumer and is limited to the user himself.

49. Some prostitutes are addicted to smoke ganja.

53. I never heard so.

55. I have sometimes heard that criminals, in order to further their design, induce their victims to stupefy themselves by partaking any of these drugs. But I cannot state this with certainty.

57. Ganja is not eaten in this province. If one cannot get good bhang they use chur as a substitute therefor.

58. The present system is working well, and can be allowed to remain.

59. No alteration necessary.

60. The agriculturists and gardeners can produce and prepare ganja.

61. I don't know about charas.

62. People of this province do not know the system to produce or prepare bhang.

63. The present system is good and can be allowed to remain.

65 and 66. The present system will do.

67. The present system will do. To tax the consumers would be a severe hardship.

68. There are licensed shops for the sale of these drugs in these provinces.

69. People are not consulted, but local public opinion ought to be consulted before opening a shop.

70. The duty on ganja and bhang imported from Native States is duly paid, and if an offender is apprehended; he is legally dealt with.

61. *Evidence of CHANDI PERSHAD, Brahmin, Malguzar, and President, Municipal Committee, Chanda.*

1. Have constantly mixed socially with consumers of the drug.

2. I accept these definitions save with regard to bhang. The term 'bbang' is, I believe, used in a different sense in the North-Western Provinces, but in these parts it is applied to the refuse of ganja.

3. It grows spontaneously in the neighbourhood of Dehra Dun, not in these provinces.

4. It is known as 'jungli ganja.'

6. Sometimes dense and sometimes scattered.

7. In the Nimar district only.

9. It is sown in July and requires a somewhat sandy soil, such as would be suitable for kharif crops.

11. No.

12. This may happen occasionally, but not to any large extent. Ganja was formerly cultivated in this district, though not very largely, but its cultivation has been forbidden for the last twenty to twenty-five years.

14. Ganja is prepared, and also bhang in the sense in which the term is used here (see question 2 above).

16. (a) No.

(b) and (c) Ganja for administration to animals, but not for human use, is obtained from the wild plant.

18. Ganja keeps good about two years. After that it loses its strength. It should be kept from damp, and if allowed to get damp may be spoilt in two months.

19. Ganja is also used as a medicine, and is occasionally eaten in lieu of bhang.

20. Charas is not used in these parts.

21. Only one kind, the flat, is used in these parts.

23. Not in this district.

24. The bhang of this district is eaten to some extent by Brahmins, Chattris, Marwaris, and Jats (from the North-Western Provinces). Low-caste people do not much use it.

25. The sale of ganja in this district is increasing. The reason is, I think, that the retail vendors outside Chanda itself get their licenses cheap, and so are able to sell the drug cheap.

26. Occasional consumers are rare. I should say 10 per cent. only. If men take it at all, they generally take it habitually; and if they take it habitually, they generally from time to time take it in excess. But constantly excessive consumers are rare.

27. Musalmans, fakirs, gosains, bairagis, Nais, Barbais, and Gohars, a few Dakhani Brahmins and Chattris, and Banias, all these are habitual consumers. Excessive consumers are generally bairagis and gosains. The company of smokers is a great cause of the habit being adopted, though there are also other causes, which will be noted below.

28. (a) Two or three annas' worth a day, or even four annas' worth.

(b) Six annas' worth a day.

29. Nothing is mixed with ganja, but dhatura is commonly mixed with bhang.

Yes I know 'bhang massala,' but it is not sold in this district. People make it for themselves. Its ingredients are rose-flowers, poppy seeds,

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black pepper, carraway seeds, kasni, cucumber seeds, milk and sugar, and almonds.

'Majum' is made of ghee, sugar, and bhang.

30. Bhang is generally eaten in solitude, but ganja is smoked in company. Their consumption is generally confined to the male sex. It is generally begun in youth, but once begun is continued to old age. Children do not consume either ganja or bhang.

31. The habit is easily formed, and with difficulty broken off. The habit of eating bhang is not so difficult to break with, but that of smoking ganja is much more so, not more than 5 per cent. of smokers give up the habit. There is a tendency for the moderate habit to develop into the excessive.

32. There is no social or religious obligations to take these drugs even amongst bairagis and gosains. Bhang is sometimes spoken of as 'Mahadeo's leaves,' but there is nothing in the Shastras to that effect.

33. (a) and (b) It is considered disreputable, because it produces intoxication, and impairs the intellect, but there is no religious prohibition of its use.

(c) No.

34. Ganja smoking is a thing which is done daily, and fore-going it would be a serious privation to those accustomed to it. This is not so much the case with eating bhang, which is a more occasional thing. Some 5 per cent. of the total population of this district are, I should say, ganja smokers, and some 3 per cent. bhang eaters.

35. (a) Bhang eating might be forbidden, but not ganja smoking.

(b) Yes, where British territory adjoins Native States.

(c) The best means of prohibition would be by gradually raising the price.

(d) The prohibition would occasion discontent amongst habitual consumers.

(e) There would be some danger from this discontent, but not much.

(f) Consumers of ganja and bhang, if cut off from them, would not take to liquor or opium.

36. No.

39. Ganja smoking is more injurious than bhang eating.

40. (a) Yes, both ganja and bhang are used by native doctors.

(b) Yes, bhang, but not ganja.

41. (a) Eating bhang is good for the digestion, but not ganja smoking.

(b) Eating bhang is also good in the way of giving staying-power and alleviating fatigue, but not ganja smoking.

(c) Neither eating bhang nor smoking ganja is of any use as a febrifuge.

Under (a) and (b) moderate eating is understood.

No other beneficial effect is obtained from the practice.

42. Habitual eating of bhang is harmless, if not beneficial, but ganja smoking is always more or less harmful.

43. Yes.

44. Ganja smoking produces intoxication immediately, but bhang eating after the lapse of an hour or two. Ganja smoking is refreshing to beginners, but not to habituals. Eating bhang is never refreshing, but produces sluggishness. They are always taken with the view of producing intoxication, and a man, whom I should call a moderate consumer, will yet take enough to intoxicate him. An excessive consumer will altogether lose his senses. Ganja smoking takes away the desire for food, but bhang eating increases it. The effects take on an average about six hours to wear off, but the time varies greatly with different people. As soon as the effects have worn off, there is a desire for more.

45. (a) Yes, ganja smoking does, even though moderate, but the bhang eater when he has recovered from his intoxication is none the worse.

(c) Ganja smoking injures the digestion, but not bhang eating.

(d) Ganja smoking generally causes asthma in habitual smokers.

(e) Yes, ganja smoking does so, but bhang eating only whilst the intoxication lasts.

(f) Ganja smoking tends to deaden the intellect, and very frequently causes insanity. It may even do so, though practised in moderation. Bhang eating does not produce insanity.

46. The effects of habitual excessive ganja smoking are the same as mentioned above, but intensified.

47. No.

48. No.

49. Ganja is often smoked by young men as an aphrodisiac, and they feel benefit from it for about a week, but after that they are worse off than if they had not taken it, and ultimately become impotent. Prostitutes sometimes take it for a similar reason.

50. Bhang is not taken for the above-mentioned reason.

51. (a) Yes.

(b) No special class of crime is peculiarly common with ganja smokers. Eaters of bhang are on the average of better character than ganja smokers.

53. No. No.

54. No.

55. (a) Yes, very often.

(b) 'Be-hoshi' may be produced by smoking ganja, but not such complete stupefaction as by excessive eating of bhang. Dhatura is commonly mixed in bhang, not in ganja.

56. Dhatura is often mixed with bhang by poor people for their own consumption, and not with any criminal purpose. It increases the bad effects of the drug.

57. People accustomed to eat bhang eat ganja if they cannot get bhang. The effects of ganja when eaten are similar to those of bhang, but stronger.

58. Action should be taken to raise the price of retail vend licenses, and thus cause the vendors to demand a higher price from the consumers.

59. (See above.)

63. (See above answer to 58.) No objection to wholesale vend system. The price of ganja could

however, if preferred, be raised by making it more expensive to the wholesale vendor.

64. No.

65. Ganja is more expensive than an equal weight of country spirit, but a man can intoxicate himself on less money's worth of ganja than of spirit. In a way therefore ganja is the cheaper of the two. I do not believe, however, that any re-adjustment of their comparative prices would cause ganja consumers to take to liquor, or liquor consumers to ganja. The classes which take the two things are quite distinct, and would always remain so.

68. My impression is that consumption on the premises is not allowed in the Central Provinces. At any rate it does not occur in the Chanda shop. Consumption of these drugs on the premises of licensed vendors is objectionable, as the consumers are likely by this means to get into bad company and habits.

69. None, so far as I know. I do not think it necessary. Respectable people, however, would not like a ganja shop near their houses.

70. No.

A certain amount of contraband ganja is used, but not much. Where there is a want of police supervision, it is introduced into this district from the Nizam's dominions. The price of ganja there is much lower than here, as cultivation there is not restricted.

Oral evidence.

Question 16.—Wild hemp grows in small quantity in the jungles of the Chanda district, in the Mulk tahsil. It is this plant cut and dried which is given to animals. The plant is slightly different to that which is used by human beings.

Question 25.—The increase of ganja consumption is due to multiplication of shops, and the low price paid for them. The drug is sold very cheap in the adjoining Nizam's dominions. There is also illicit sale by the retail vendors in other villages than those where their shops are situated.

Question 28.—A very moderate smoker spends not less than one anna a day. Bairagis and such people spend as much as 8 annas a day.

Question 29.—Poor people mix dhatura with their bhang when they cannot get bhang in sufficient quantity. It is the liquid compound I refer to. Dhatura excites heat, and headache.

Question 34.—The proportion of consumers given in my answer 34 is correct. Bhang is not consumed here as it is in Marwad.

Question 35.—My meaning is that the bhang habit can be discontinued, but people cannot abandon ganja-smoking. People would not take to other intoxicants if hemp were prohibited. They might take to opium-smoking (madak).

Question 41.—Ganja does not relieve fatigue in any degree. Consumers of ganja are all weak, bad workers. Bhang is not febrifuge. It is a cooling drink.

Question 44.—Bhang-drinking is refreshing to the occasional consumer, but not to the habitual.

Question 45.—I have seen a fakir (Musalman) who had become insane from the use of the drugs. That was 5 or 6 years ago, but I cannot remember his name. He was simply a beggar. I have heard of other cases.

62. Evidence of THAKUR MAHARAJ SINGH, RAI BAHADUR,* *Malguzar, Saugor.*

1. I have seen much ganja smoking, and have observed the result of its effects and abuses. I have frequently made many enquiries on this subject, so that I can speak with some authority on the subject.

2. Yes; names under which the products are known: *Dhaha* bhang, *Bahraich* Ganja ki-patti.

3. Do not know any cases of spontaneous growth in the Central Provinces.

4. Not known.

5. Wild hemp is unknown.

6. Wild hemp is unknown.

7. Yes; ganja and bhang in the Khandwa district of the Central Provinces. Fibre is not used, nor is charas produced.

8. The area under cultivation has decreased because special licenses are now granted for cultivation of the hemp plant in one district only in the province.

9. Generally the seeds are sown broadcast.

10. They are of the same classes as other cultivators, *i.e.*, the agricultural classes only cultivate the hemp.

11. No.

12. I have no knowledge of this.

13. Yes, to Nimar only.

14. Yes; ganja and bhang. Charas is not made in the Central Provinces.

15. (A) *Ganja*.—When the shoots at the top get ripe they are cut, and then pressed by heavy stones or some weights. Before the ganja is completely dry, it is exposed to the air and then used.

(C) *Bhang*.—The hemp plant is stripped of its leaves. The leaves are boiled for some time, and then dried. The leaves are then ground with pepper, coriander, almonds, and then mixed with sugared water and drunk.

Ganja is prepared for smoking in this way. The "kuli" or buds are rubbed well in the palms of the hand till well cleaned, and then mixed with "gudaku" and smoked.

16. No; where ganja is grown bhang is prepared.

Yes, where the plant grows in abundance.

17. Agricultural classes, like Kunbis and Kurmis and Lodhies.

18. Ganja would deteriorate, say, after a year's keeping; it would lose its effect to some extent; "charas" increases its strength by keeping.

Damp causes deterioration chiefly. To prevent deterioration, these are placed in a pot which is made air-tight.

19. No; ganja is used also for medicinal purposes. Ganja is added to other ingredients used for the cure of rheumatism. In nearly all districts where ganja is produced or available, it is purchased by people to mix up with other medicines.

20. Bairagis, sepoys, and day-labourers smoke ganja: 50 per cent. of bairagis and day-labourers of the lower classes smoke ganja. All over the Central Provinces people smoke ganja.

21. Flat kind is preferred. Only flat kind is used.

22. No charas is used here.

23. No.

24. All classes more or less drink bhang, except Muhammadans: 55 per cent. of the people drink bhang. Travellers from up-country eat bhang. About 20 per cent. of them eat bhang.

25. The proportion of persons who use these drugs has decreased since the last twenty-five years. There was no restriction before, so these drugs were largely used previous to twenty five years ago.

26. Charas is not known here.

Ganja—

(a) 5 per cent. of consumers are habitual moderate consumers.

(b) 5 per cent. are habitual excessive smokers.

(c) 25 per cent. occasional moderate consumers.

(d) 15 per cent. occasional excessive consumers.

Bhang—

(a) 10 per cent.

(b) 5 per cent.

(c) 20 per cent.

(d) 20 per cent.

27. The more respectable classes use bhang; the labouring classes use ganja. These classes live from hand to mouth. They smoke ganja when tired and to enable them to undergo fatigue. If a man is smoking a pipe, he hands it round to any person who may be sitting near him at the time, each having a pull at the pipe till the stuff is burnt to ashes.

28. (a) 4 pipes per day, *i.e.*, $\frac{1}{2}$ tola.

(b) 2 annas—1 tola.

29. "Gadaku" is mixed with ganja; "bhang" is mixed with pepper, almond, cucumber seed, sugar, and spices. Dhatura is sometimes used in "bhang." The object is to increase the intoxicating strength of the drugs.

The bhang massala is made of the ingredients above described.

30. Bhang is openly consumed; ganja is more or less always consumed in solitude. It is mainly confined to the male sex. Adults are generally addicted to these drugs. No; it is not usual for children to consume these drugs.

31. (a) Yes. (b) It is difficult to break off. (c) Yes.

32. (a) Special customs not known. Bhang is generally taken in Holi and other festive occasions. It is not essential that any drug should be taken on any occasion, special or otherwise. It is generally temperate. It is not injurious or likely to lead to habit.

33. (a) They are not considered articles necessary for life.

(b) No. To hatred and dislike to the partaking of any drugs that will intoxicate and make a man a beast.

(c) No.

34. No; it would be a benefit. People who give up or have to give up consuming these drugs improve in health. Can't give an idea of the probable numbers of each class.

35. (a) Yes.

(b) In isolated cases.

* Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

(c) By prohibiting cultivation and prescribing severe penalties for introduction of the drugs into British territory.

(d) Not serious discontent, though there will be a little discontent at the beginning.

(e) No.

(f) The lower classes will take to liquor instead if they can afford it.

36. No.

37. They are different. Ganja brings on intoxication much sooner than charas smoking.

38. I do not know.

39. Smoking is more injurious than drinking or eating.

40. Native physicians prescribe them sometimes. Bhang is used in treating cattle for certain specific diseases, such as colic and loss of appetite.

41. (a) No.

(b) Yes.

(c) Yes.

(d) No.

(e) Labouring classes.

(f) Moderate occasional.

42. No; habit is generally formed by persons who begin moderately at first.

43. No.

44. (a) Effect.—He would have a craving for more.

(b) Yes.

(c) A little intoxication.

(d) No.

(e) It creates appetite.

(f) Effects of ganja last one hour; bhang, three hours.

(g) Weakness and lassitude.

(h) No.

45. (a) Yes. Ganja smoking produces idiocy and lunacy, as it affects the brain.

(b) Yes.

(c) No.

(d) Yes; it causes dysentery and asthma.

(e) Yes.

(f) Yes; it produces insanity. It produces violent insanity. In some cases the insanity is permanent and in others temporary. Yes; after liberation from restraint symptoms will be reinduced. The eyes become reddish and inflamed and appear vacant. Spittle trickles from the mouth. Yes; many have confessed that they became insane through ganja smoking.

(g) Cannot answer this question.

46. It brings on insanity and causes loss of appetite; it injures digestion and impairs the moral senses, and leads to crime and immorality.

47. It is not hereditary; it affects the children of the consumer. The issue is weak and not healthy.

48. The effects are worse than those described above.

49. (a) Not known. (b) Not known. (c) Not known. (d) It tends to produce impotence.

50. Same as above.

51. Most of the bad characters are ganja smokers. One-third of the thefts and acts of violence committed are due to the effect of ganja smoking.

52. Excessive use leads to great "marpeets" and many of the acts of violence for which offenders are brought before the tribunals.

53. Yes.

54. Yes; when persons wish to commit crime at night, they sometimes smoke ganja to keep themselves awake during the night.

55. Yes.

56. I know of no cases where the effects are modified by admixture. In cases of poisoning dhatura seed is sometimes mixed with bhang or ganja and administered.

57. Do not know. These two drugs are not generally eaten or drunk; they are smoked.

58 and 59. It is capable of improvement. The present contract system is objectionable. Government should directly sell the drug to consumers and consumers should be licensed. The more respectable classes who consume the drug will be too ashamed to take out licenses, and hence they will give up consuming this drug.

60. Not known.

61. Charas not produced in Central Provinces.

62. Not known.

63. I object to the wholesale and retail sale as at present made. The retail sale should be made through Government agency.

64. No; but none of these drugs should be imported into the Central Provinces.

65. It is reasonable, but the taxation ought to be raised to an almost prohibitive pitch, that is, if the cultivation of the hemp plant is not prohibited.

66. In the Central Provinces we have only the flat kind of ganja, so there ought to be but one rate, if at all.

67. No special objections beyond what I have already stated.

68. No.

The consumption should be in shops specially provided.

69. No; but the wishes of persons in the neighbourhood should be consulted. Local opinion should be consulted.

70. Ganja is largely imported from Native States into the Central Provinces, as foreign ganja is cheaper than that cultivated in the Central Provinces. Professional and habitual smokers more or less purchase foreign stuff, and introduce and smoke and sell the same in our territory.

63. *Evidence of RAO VENKAT RAO, Brahmin, Malguzar, and Political Pensioner, Saugor.*

1. My answers are based on information which I have received from other persons; and from personal knowledge of people who are addicted to the use of the drugs, and who are known to me. I was formerly a Tahsildar exercising 2nd class magisterial powers, and tried many ganja cases for a period extending over twenty years. Thus I had ample opportunity for obtaining information regarding matters connected with hemp drugs.

The definitions mentioned may be accepted for this province; but in this province bhang is divided into two classes, according to quality, *viz.*, duba or dudhia and ganjeri. The former is of superior quality.

3. The hemp plant does not grow spontaneously anywhere in this province and hence I am unable to answer questions Nos. 4, 5 and 6.

7. The hemp plant is not now cultivated in these provinces. I cannot therefore give any reply to questions Nos. 8, 9, 10, 11 and 12.

13. As far as I know the cultivation of the hemp plant for ganja is prohibited in all the districts of this province.

14. Ganja, charas and bhang are not prepared in this province. I am therefore unable to answer questions Nos. 15, 16 and 17.

18. Ganja, bhang and charas do deteriorate by keeping. Their intoxicating effects are lessened by the keeping, and in two years they are thrown away as useless. Damp during the rains is the cause of the deterioration. As a rule no measures are taken to prevent deterioration.

19. Ganja is used medicinally. For rheumatism it is applied as an ointment on the affected part. In cases of dysentery it is taken internally in small doses.

20. Ganja is universally smoked by the bairagis throughout India, and by all classes of labourers of the lower castes. About 95 per cent. of the bairagis and about 50 per cent. of the labouring classes smoke ganja.

21. Flat ganja is preferred in this province for smoking.

22. Charas is not used in this province.

23. Bhang is never used for smoking in this province.

24. Some people of all classes in this province eat bhang during the cold weather, and drink it during the hot season.

I cannot say what is the proportion of the people who do so.

25. In my opinion the use of ganja in this province is on the increase, but I am unable to account for this increase.

26. I cannot answer this question.

27. Labourers and persons of low position in life are addicted to ganja smoking. Bairagis take ganja to prevent evil effects of drinking water of different places. Labourers smoke it as a relief from the fatigue of labour.

28. I cannot say.

29. Dhatura seed is sometimes mixed with ganja and bhang to increase the intoxicating effects. I do not know of any bhang massala being sold.

30. Ganja and bhang are sometimes used in company. The use of ganja and bhang is confined to the male sex. I have never heard of children being addicted to the use of these drugs.

31. (a) and (b) The habit of consuming ganja and bhang is not easily formed, but when once formed is hard to break off.

(c) There is a tendency in the case of these drugs for the moderate habit to develop into the excessive.

32. In this province there is no custom, either religious or social, regarding the consumption of ganja or bhang.

33. (a) It is generally regarded as being injurious.

(b) The public opinion is against the use of these drugs. The use of these drugs is held in disrepute because it is injurious to health.

34. At first it would be felt seriously by the consumers if they were to forego the use of ganja or bhang.

35. It would not be feasible to prohibit the use of all these drugs at the same time. If prohibited, they would be consumed illicitly. The prohibition could be enforced by law. The prohibition would create discontent among consumers, but such discontent would not amount to a political danger. The prohibition would not be followed by recourse to alcoholic stimulants or other drugs.

36. There is some reason for thinking that alcohol is now being substituted to some extent for these drugs.

I can give no reason for this.

64. *Evidence of RAO SAHIB BALWANTRAO GOVINDRAO BHUSKUTE, Brahmin, Jagirdar of Timborni, Barhanpar, Nimar District.*

1. I have a number of dependents and a large number of menial servants, a few of whom are more or less addicted to the use of the hemp drugs; I have come across several persons who are more or less addicted to the drugs in question.

2. Bhang is obtained from the dry leaves of a species of hemp plant, different from that from which ganja is obtained. The definition of charas, as given by Dr. Prain, may be accepted, so also the definition of ganja. There are two varieties of ganja known in these parts, *viz.*, flat ganja and chur. It is manufactured in the manner indicated

in Dr. Prain's report. Round ganja is unknown in these parts. The products are known here by names (1) bhang, (2) charas, and (3) ganja.

7. There is cultivation of hemp plant in a village called Bhigava of my estate. It is situated in the Khandwa tahsil, Nimar district.

10. The cultivators do not form any particular class. They are ordinary agriculturists.

18. Every one of these drugs deteriorates by keeping. It loses all its effect in time. It keeps good with ordinary care for about two years. The action of atmosphere causes deterioration.

19. Ganja and charas are usually used for smoking. Ganja also forms an important ingredient in the preparation of majum and gulkaad, which are eaten. Ganja is also substituted for bhang for drinking purposes. A preparation consisting of ganja, salt, haldi, and wheat flour is made and given to bullocks for stimulating their appetite. This is prevalent in the Nimar district.

20. Ganja and charas smoking is not confined to any particular class or community. It is more freely used by the lower order of society, agricultural classes excepted. The class of bairagis (religious mendicants) are notorious as ganja smokers. Artists, whose trade is of a sedentary nature and requires application, are more or less addicted to ganja smoking, so are also persons whose duties subject them to the inclemencies of weather and require them to move about in bad and unhealthy places. It should, however, be borne in mind that members of higher orders of society are not usually addicted to ganja smoking although they are placed in circumstances indicated above.

21. Flat ganja is preferred for smoking.

23. I do not know of people ever using bhang for smoking.

24. I know of no persons eating bhang. Persons used to drink bhang sometimes eat it, when they do not care to take the trouble of preparing it in liquid form.

25. The use of ganja appears to be on the decrease owing to taxation to which it is subjected and the growing poverty of the people.

	Ganja. Per cent.	Bhang. Per cent.
Habitual moderate consumers	75	80
Habitual excessive consumers	15	10
Occasional moderate consumers	5	5
Occasional excessive consumers	5	5

27. These are taken from all classes of people. The habits of life or circumstances, which lead to the practice cannot be particularised. I know of persons of active as well sedentary habits given to the use of ganja. So also ganja smokers can be found among people under any set of circumstances.

28. Cost per diem per head—

	Ganja.	Bhang.
Habitual excessive consumers	4 annas	2 annas.
Habitual moderate consumers	1 anna	1 anna.

29. The ingredient ordinarily mixed with ganja is tobacco. The ingredients exceptionally mixed are :—(1) Gudakhoo for suppressing its bad smell; (2) poison root, (3) arsenic, (4) nux vomica, (6) dhatura, for raising the degree of intoxication.

No particular class can be named by which the above are so mixed.

(1) Pepper, (2) aniseed, (3) almonds, (4) dry rose buds, (5) cardamoms, for giving it a taste and flavour and for accelerating its cooling effects.

The ingredients exceptionally mixed are :—(1) chicory, (2) kamalkakdi (lotus seed), (3) cucumber seeds, (4) poppy seeds, for above reasons in hot weather; (5) poison root, (6) dhatura, (7) arsenic, (8) roots of jowari, (9) roots of kanher, to give it exceptionally high intoxication power.

30. The consumption of both ganja and bhang is practised in limited company to a greater extent. It is confined to the male sex excepting a few of the prostitutes, but it is not confined to any time of life. It is not usual for children to consume any of these drugs. Some ill-behaved lads, moving in bad company, begin to use it about the time they are 15 or 16 years old.

31. The habit of consuming ganja or bhang is easily formed. It is difficult to break off, but not so difficult as the habit of consuming opium is. There is a tendency in case of both ganja and bhang for moderate habit to develop into the excessive one.

32. There is no custom, either social or religious, with regard to the consumption of any of these drugs; on picnic days if the party consists of young men of levity, bhang is sometimes prepared with ordinary bhang-massala to be drunk an hour or two before the meals; on similar occasions ganja smoking takes the place of bhang if the party consists of members of lower orders of society. During Holi festivals bhang is more largely used among all classes of people, the object being to cheer up their spirits and add to the enjoyment of the festival. It is always temperate. It is not at all likely to lead to the formation of habit or to be otherwise injurious.

33. The consumption of each of these drugs is regarded as low. The use of ganja as well as bhang is generally held in disrepute. The sentiment may be attributed to the control one loses more or less over his own actions and speech, and also to the eccentricity of disposition it tends to create. Use of ganja is considered more vicious, in fact the use of any intoxicant is regarded as disreputable among the Hindu community. There is no custom of worshipping the hemp plant on any occasion by any sect of people.

34. To forego the consumption of any of these drugs would be a serious privation to such persons as have been long in the habit of using it. The gosains and bairagis may be cited as examples. They are half-clad. They endure the heat of summer and cold of winter under the influence of ganja and bhang, and for them to forego the use of these drugs would mean a very serious privation. To others it will cause great uneasiness. It may even affect their health for some time.

35. It may be feasible to prohibit the use of any of these drugs, but it will certainly not be feasible to prohibit the use of all of them. If the use of all the drugs were prohibited entirely, the people will be more inclined to take recourse to the consumption of illicit drugs. Yes, the prohibition will occasion discontent to some extent among moderate consumers, and will lead to serious discontent among habitual excessive consumers. I do not think the discontent will amount to political danger. It may, however, cause petty riots. The prohibition will be followed by recourse to alcoholic stimulants in case of those whose religion permits the use of such stimulants and who can afford to pay for them, or to other drugs such as opium, poison root, arsenic, dhatura, nux vomica, roots of jowar and kanher plants, in case of others.

36. I do not think that alcohol is now being to any extent substituted for any of these drugs. On the other hand, I know of a few cases of persons giving up alcohol in favour of ganja. The tendency of these drugs taking the place of spirituous liquors may be attributed to comparative poverty among the people addicted to the use of the intoxicating drugs, spirituous liquors costing more than the hemp drugs.

37. The effects of charas smoking are different from those resulting from ganja smoking in this particular that the intoxication produced by the former is doubly strong. It causes a certain amount of momentary fainting sensation in the smoker and produces a sort of shock in chest as soon as it is smoked.

38. Round ganja is not available in these provinces. The effect of flat ganja is stronger than that of chur in degree though similar in kind.

39. The smoking of any preparation of hemp plant is in my opinion not less injurious form of consumption than drinking or eating the same, but on the contrary it is decidedly more injurious, because smoking acts more directly upon brain than eating or drinking.

40. The use of ganja is prescribed on account of its medicinal qualities in *Yunani* and *Mishrani* Schools of Native physicians in the treatment of certain diseases, such as dysentery, etc. It should, however, be borne in mind that ganja in itself is never prescribed as medicine. It only forms an ingredient in very small quantities; ganja is also used in the treatment of a cattle disease called Fansi—a sort of lung disease.

41. There is a popular belief that the moderate habitual use of ganja is beneficial in its effect as food accessory or digestive. It also gives staying-power under severe exertion or exposure and alleviates fatigue. It also acts as a febrifuge or preventive of disease in malarious and unhealthy tracts. The drug is not, however, used specially for one's benefit in any classes. Those who smoke do not smoke for health, but for intoxication. When they get into the habit, its use becomes necessary for the preservation of their health. It is believed that bhang allays the effects of hot weather. I do not think that the use of charas, ganja or bhang, however moderate, is beneficial to health.

43. Yes, they are inoffensive to the neighbours.

44. Ganja smoking is refreshing. It produces intoxication; does not allay hunger, creates appetite. The effect lasts a couple of hours. There are no after-effects. Want of subsequent gratification produces longing and uneasiness. Bhang, on the other hand, is not refreshing. It produces intoxication, creates appetite, does not allay hunger. Its effects begin to be felt an hour after it is drunk. Its effects last from 6 to 8 hours. It causes after-effects of drowsiness and indisposition to work. To habitual consumers the want of subsequent gratification produces longing and uneasiness.

45. Habitual moderate use of ganja impairs constitution if the consumer is not richly fed. It slightly injures the digestion. It also causes bronchitis and, in older age, asthma. It does not impair moral sense or induce laziness or habits of immorality or debauchery. It does not seem to deaden the intellect. The habitual moderate use is not known to have produced insanity. The above remarks apply to habitual moderate use of bhang also, except that it does not cause bronchitis, asthma or insanity.

46. Physical effects of the moderate use of ganja are still worse when it is taken in excessive quantity. The excessive use of these drugs does make one lazy and is likely to tend towards debauchery. It does deaden the intellect and produce insanity. The type of insanity is mania; as a rule insanity is temporary. The symptom is re-induced after the use of the drug is again com-

menced after liberation from restraint. The typical symptoms of insanity from these drugs are the following:—The persons so affected have loss of will power. They abuse any one they meet with, would at times stuff their stomachs with excessive meals; would not mind doing harm not only to their relations but to others. They look very fearful, their eyes being prominent and red.

47. The habitual moderate use of none of these drugs appears to be hereditary, but such use of any of these affects injuriously the constitution of children. They are born weakly.

48. Excessive use injures the constitution of children the more, but the habit is not hereditary.

49. Yes, it is so used by prostitutes, but in rare cases. I hear of no cases in which use of hemp produces any impotence.

50. Excessive use is not practised as an aphrodisiac, either by males or prostitutes, nor is it known to have produced impotence.

51. A fair proportion of bad characters are habitual moderate consumers of these drugs, but the moderate use has no connection with crime, either in general or special.

52. Even the excessive use, unless when it produces insanity, does not tend towards crime.

53. Excessive indulgence does not seem to incite to unpremeditated crime, violent or otherwise. I know of no cases in which it has led to temporary homicidal frenzy.

54. No, these drugs are not so used by criminals who are not habitual consumers. By habitual consumers they are so used.

55. Yes, criminals do sometimes induce their victims to partake of these drugs to stupefy them. Complete stupefaction can be produced by these drugs without admixture.

56. Substances, such as dhatura, arsenic, poison root, nux vomica, are sometimes mixed with ganja by habitual consumers for producing higher degree of intoxication.

57. Ganja is eaten by some persons but not charas. Articles such as dhatura, etc., are mixed with it if so desired by the consumers to produce stronger effect.

58. I know only the outlines of the present system of excise administration in respect of hemp drugs, and I consider it to be working fairly well.

60. I think cultivation of ganja and the process of its preparation are sufficiently controlled.

66. There should be different rates of taxation for flat and broken ganja, because the latter produces lower degree of intoxication.

68. There are shops licensed for the sale of these drugs, but none for the preparations consumed on the premises. These shops are rather held in bad repute by people in general.

69. Wishes of the people are not consulted in any way before a shop is opened in any locality. Local public opinion should, I think, be considered in the matter.

65. Evidence *of DAMODHAR DASS, Brahmin, Mafidar, Bargarh, Sambalpur District.

1. I live in Bargarh and see many people there in course of my occupations. There are some 10 or 20 ganja smokers in Bargarh.

2. I have met with only two kinds of ganja—(1) called siddhi, which is drunk mixed with spices, and (2) kalli ganja, which is smoked. I do not know of charas being used at all. I have simply heard that such a thing is used in Cuttack. I don't know about these different kinds of ganja.

14. No kind of ganja is prepared in Bargarh.

19. As well as for smoking, ganja is used in preparing native medicines. That is the only other use I know of it being put to.

20. Except Brahmins and Kurans (Mahantis), all classes smoke ganja. No particular class is specially addicted to it. Perhaps 5 per cent. of the people generally smoke ganja.

21. I don't know.

23. No.

24. Brahmins and Kurans chiefly; also other classes. I think about 5 per cent. use it. Brahmins and Kurans do not use ganja. The use is not confined to any particular locality. Of five consumers, three would drink bhang and two would smoke ganja. No one eats bhang except in the form of "modak." (See answer 49.)

I think 5 per cent. of the people generally would use either bhang or ganja, bhang being generally confined to the higher classes, and ganja to the lower.

25. I think the use of ganja and bhang is on the increase. I cannot give any particular reason, but I observe more people using it than formerly.

26. Of ganja, if 5 per cent. of the population use it, 3 per cent. would be (a), 2 per cent. (b), 1 per cent. (c), and .8 per cent. (d). I think the proportions would be the same for bhang.

27. I cannot say that any particular class, which uses either ganja or bhang, is more moderate or more excessive than others.

(a) People use both bhang and ganja to improve their appetite, and to make them feel strong.

(b) Habitual excess comes from the habitual use, but is not common.

(c) No particular reason can be given for occasional moderate use, but perhaps people take it for the sensation.

(d) Only those accustomed to the drugs can consume them occasionally excessively. They probably do so from vicious tastes and from liking to get intoxicated.

28. I cannot guess.

29. Tobacco is generally mixed with ganja when smoked. The tobacco makes it affect the brain less. Therefore it is used. Dhatura seeds are sometimes mixed with ganja. They have the effect of increasing its intoxicating power and are therefore sometimes used. With bhang, pepper, poppy heads (the seeds of these), coriander seeds, cardamoms, sugar, and other spices are mixed. These things are used because they cool the head. Poppy seeds do not intoxicate much, and also tend to cool the head. All these things are called bhang massala. I don't know of any other ingredients.

30. Both smoking ganja and drinking bhang are done in solitude. The habits are confined to

men. No women do so. 18 to 30 is the common age. Most give up the habit after 30. Children do not use the drugs.

31. The habit is easily acquired. It is not difficult to shake off. There is not much tendency for moderate use to become excessive.

32. The use of both drugs is looked down upon socially. Religion forbids the use of them. People are not outcasted who use them, but the use is disapproved of both in the opinion of society and by religion.

33. The use is disapproved of, because it injures the heart and brain, *i.e.*, for its physical, mental and moral effects. I do not know of the hemp plant being worshipped, but a preparation of bhang is offered to Mahadeo. There is no special occasion in which it is offered.

34. There would be no particular privation in stopping the use of either drugs, as the habit is soon cured, and no benefit is derived from the use of the drugs.

35. I do not think the prohibition could be enforced so as to prevent illicit consumption. There would be serious discontent. They might even rise against the Government. I do not think hemp-users would take to liquor or other drugs.

36. No.

39. I think that drinking bhang is less injurious than smoking ganja, because the smoke which goes inside the body affects the brain. Liquid bhang does not go to the brain so much. I have observed that smokers are more affected than drinkers.

40. Both bhang and ganja are used. They produce appetite and are sedatives. They are both also used for cattle diseases. I have used it for cattle myself. I have heard of it being used for men.

41. As to both bhang and ganja—

(a) yes.

(b) yes;

(c) and (d) I don't know.

See question 27. I cannot say.

Moderate occasional is referred to.

42. Yes, because I see no bad effects.

43. Yes.

44. It refreshes him, and is not intoxicating if too much is not taken. It makes appetite. The effect lasts for half-a-day. There are no after-effects and no uneasiness. I have not seen their effects myself. I have only heard.

45. No.

46. Excessive use impairs the constitution. It disables him from walking and makes his temper irritable. It deranges his mind and brain. Digestion is injured, and appetite lost. It may cause dysentery, cough and asthma. It injures the moral sense, and induces laziness and debauchery. It deadens the intellect and produces temporary insanity. Sometimes insanity takes the form of quarrelling; sometimes the insane person is silent and only mutters. There is no particular symptom of having insanity. The symptoms may be induced by using the drugs again. I cannot answer the remaining questions. These remarks apply to both ganja and bhang. I speak from what I have heard.

47. I do not think it is hereditary.

48. The children of excessive smokers are not affected in any way. I have seen many such.

49. A preparation of ganja called "modak" is used for this purpose. I do not know if prostitutes so use it. "Modak" is not so injurious as ordinary ganja. It is a mixture of some 50 or 60 medicines. It tends to produce impotence. "Modak" is the only form of hemp I know of used for this purpose.

50. It is not used to excess much. The excessive use of it produces impotence. I have heard this.

51 and 52. I do not know.

53. I do not know personally. I have heard that people commit sometimes murder or suicide, or try to do so, when under the influence of hemp, but I do not know of any particular case.

54 and 55. I do not know.

56. See my answer to 29. I do not know details. Too much dhatura will cause death.

57. People always smoke ganja.

58. I do not know much about the Excise Administration.

59. No suggestions to offer.

63. I have no objections.

69. I have no objections to the present system of licensing shops.

70. Ganja is smuggled because it is cheap in Native States. I know of no particular facts to which I wish to draw attention.

Oral evidence.

Question 25.—The increase has taken place

among the lowest labouring classes. They have not exchanged liquor for ganja. The increase is due to the general growth of the habit. The price of liquor has risen. The price of ganja has risen also, but not sufficiently to check consumption. Ganja is portable and convenient for use. The consumption of hemp has increased with the increase of population, but not in the same proportion.

Question 26.—The consumers of ganja are about 3 per cent of the population, and of bhang 2 per cent. The percentages given in my recorded answer are not in accordance with my statement.

Question 24.—The proportions of consumers of ganja and bhang in my answers are not correctly recorded. I stated that the consumers of ganja were 3 per cent, and of bhang 2 per cent.

Question 30.—It is true that some people do abandon the drugs after 30 years of age. Confirmed consumers are however the majority, and do not give up the habit.

Question 32.—The Shastras contain general prohibition against intoxication, but no special injunction against these drugs. I have heard that the Tantriks state that by the use of siddhi the work of the god is well accomplished.

Question 35.—People will not take to liquors on account of its expense and the fear of losing caste, and because the intoxication of liquor leads to crime and violence, which is not the case with hemp. People could reduce their consumption of the drugs. They might take dhatura instead.

Question 59.—It is not advisable to prohibit the drugs. Consumption might well be reduced by increasing the duty or locating the shops at greater distances from one another.

66. Evidence of the REV. I. JACOB, Church of England Missionary, Chairman, District Council, etc., Chanda.

1. (1) Personal observations and contact with those who indulge in hemp drugs. (2) Local enquiry. (3) Information gathered from those who have a direct concern in the sale and supervision of ganja. (4) Reading books on the subject.

2. i.—Bhang as technically defined by Dr. Prain is imported from other provinces of India and is utilised only in a few districts of the Central Provinces. Locally, the accidentally broken parts of ganja which should properly be called the "dust of ganja" goes by the name of bhang, and is so sold by retail vendors only at a cheaper rate. The wholesale vendor of course is required to burn all the refuse of ganja and to sell only the "kalli."

ii.—Charas is not imported into any of the districts of the Central Provinces. The generality of the people know what it is and how it is prepared. The rarity of its procurance accounts for the vulgar belief that it is only used by the wealthier classes, at any rate this is the belief prevalent amongst the "hoi polloi" of Chanda.

iii.—Ganja—Only one kind of its variety is imported into all the districts of the Central Provinces and that is flat ganja.

Viewed with the above qualifications, the scientific definitions of Dr. Prain may be accepted for

our province.

3. I am not aware of any district in which the hemp plant, i.e., *Cannabis sativa*, or ganja, grows spontaneously.

4. The hemp plant is known by different names, such as—

(1) *Cannabis sativa* or ganja plant.

(2) *Crotalaria juncea* or "san."

(3) *Hibiscus cannabinus* or "ambadi." The fibres of the latter two are used for cordage. These three are distinct plants.

5. "Wild hemp" is locally called "fareed butti" or "ranganja," and it grows on the sides of mountainous places. This "fareed butti," which I understand by wild hemp, is used by native quacks in liniments for rheumatic pains.

6. The growth of "fareed butti" or wild hemp is very scattered. Whether this is used for smoking by the jungle tribes could not be ascertained.

7. Yes: there is for (a) the production of ganja *Cannabis sativa*; but the ganja-yielding plant is not cultivated in the Central Provinces either for (b) (c) charas or bhang, nor for its fibre. (d) The cultivation of *Crotalaria juncea* is practised for the sake of its fibre for cordage, as also *Hibiscus cannabinus* for the same purpose.

(a) The hemp plant is cultivated for the production of ganja in the Khandwa Tahsil of the Nimar District of the Central Provinces, and also very widely in the Feudatory State of Bastar.

8. There has been considerable fluctuation in the area for the cultivation of ganja in the Nimar District of the Central Provinces, where only it is permitted to be cultivated. The area under cultivation for the last four years is as under—

See Excise Report for 1892-93, page 25.	1888-89. 1889-90. 1890-91. 1891-92.			
	Acres.	Acres.	Acres.	Acres.
	940	993	520	653

and in 1892-93, it was 940 acres. No other reason can be given for this normal resumption in 1893, except that the cultivators found it a most remunerative concern and that there was a great demand for the commodity in the market.

9. The methods of cultivation are more or less similar to those which are in vogue in Eastern Bengal. This is what I have heard.

10. The persons who cultivate hemp for its narcotic properties do not form a special class. They are the same as other agricultural cultivators so far as I have been able to ascertain.

11. I have never heard of the seed of wild hemp being used for the cultivation of ganja.

12. I have no reason to suppose so. Can give none. It cannot be, as wild hemp is not cultivated for the production of ganja.

13. (a) Yes, it is. To the district of Nimar only. It is not common to all districts of the Central Provinces.

(b) I have not been able to study this question.

(c) The cultivation of ganja in any part of the Central Provinces would not be impossible. As a matter of fact it used to be cultivated in the Nagpur District, where a certain field to this day goes by the name of "ganja ka khet." Before the British rule, it could be sown with impunity in any individual's house. No restriction whatsoever was laid in the Raja's time on the cultivation of ganja. The same practice obtains now in some of the protected Native States of India.

14. Yes.

(a) Ganja is prepared in the Nimar District and at Bastar.

(b) and (c) Charas and bhang are not produced anywhere.

The quantity of ganja produced in the Nimar District is as under for the last five years as per Excise Report for 1892-93—

1888-89.	1889-90.	1890-91.	1891-92.	1892-93.
Maunds.	Maunds.	Maunds.	Maunds.	Maunds.
9,827	11,116	7,237	6,684	6,685

15. Ganja for smoking is prepared in the Nimar District only, and the methods adopted in the preparation of cultivated ganja are not very different from those practised in the preparation of flat ganja in Eastern Bengal.

16. In the Central Provinces the hemp plant cannot be grown, nor any of its narcotic properties prepared, without pain of punishment under the Excise Act. Bhang is not therefore prepared by the people in their houses, but I think they can do so easily if they are allowed to grow the plant in their houses.

17. If permitted to grow the hemp plant freely without any Government restriction, I am sure

almost all classes of people who desire to use the hemp plant drug would prepare it.

18. Ganja, I am informed, deteriorates by being kept loose in an open place. It is said to lose its effect in time. With ordinary care ganja keeps good for about a couple of years. Cold air and damp. In order to prevent deterioration ganja should be well packed up in hampers, covered over with thick cloth, and kept in a dry place.

19. Charas is not imported into the Chanda District at all. But ganja is used for smoking; in preparing a cold drink called "bhang" in those places where bhang properly so called is not available; in preparing a powder called "panjari"; is used in the preparation of a sweet called "majum"; is used in the preparation of a confection called "yakuti"; is used with the dough prepared for a savoury patty called "vada"; is used with the dough prepared for a savoury patty called "bhajas"; is used for a savoury preparation called "chivda."

The last three are prepared on certain festive occasions especially by the Dhakani people.

Majum is prepared in some districts of the Central Provinces, but its preparation is known all over India. I have seen it personally myself, though I have not used it. I have heard of its freaky effects.

20. Ganja is smoked by—

(1) 75 per cent. of bariagis, gosains and jogis.

(2) 50 per cent. of fakirs and Pasis. The latter are known in these parts as "Rangdas."

(3) 10 per cent. of Pardesis from the North-Western Provinces; 10 per cent. of Gonds and other classes.

This is the case all over British India, and the proportion may be decreased for the population of Chanda.

21. The people of these provinces do not understand much about the different varieties of ganja. Suffice it that which gives them the greatest intoxication is the best ganja.

It may be noted that only Khandwa ganja is used licitly, and that people ask for "kalli dar ganja" for smoking.

22. Charas is not imported at all into the Central Provinces, so far as I have been able to learn.

23. I have not heard of bhang being used for smoking.

24. A beverage called bhang is prepared from "bhang" properly so called, and is in special favour with many classes of Hindus. This drink is resorted to especially in the hot season. Brahmans, Marwaris, Pardesis and others use it, particularly in the four months of the hot season. 50 per cent. of Marwaris and Pardesis, and 5 per cent. of other classes.

I have heard of bhang being also eaten with other articles.

25. From what I have been able to ascertain the use of ganja is on the increase in the Central Provinces. The reason is not very far to seek. In the first place, it is very cheap compared with the price of country liquor. Secondly, it is easily obtained and consumed. Thirdly, it can be used by all classes of the Hindu community without incurring religious excommunication. For instance, a Brahmin would be put out of caste if he drank liquor, but he would not be outcasted if he smoked ganja, drank bhang, or ate opium, or any

preparations of these drugs. I am of opinion that the latter class are more specially swelling the ranks of ganja-smokers. I mean by those to whom liquor is a religious prohibition.

26. The answers are a mere guess. Under—

- (a) I should put down 10 per cent. for Chanda District;
- (b) 2 per cent. for Chanda District;
- (c) 4 per cent. for Chanda District;
- (d) 1 per cent. for Chanda District.

27. (a) The habitual moderate consumers are the labouring classes, whose earnings are small, such as Gonds, sweepers, Lohars, Badhais and Chamars.

(b) Habitual excessive consumers are the gosains, bairagis and jogis.

(c) Occasional moderate consumers are the Dhakani Brahmins and other Hindus.

(d) Occasional excessive consumers are the gosains and bairagis.

The habits of life and circumstances which lead to the practice of ganja in its various forms are in the case of—

- (a) hard and unwholesome labour;
- (b) devotion and forgetfulness of pains endured and austerities practised by them;
- (c) mere pleasure and excitement for the time being;
- (d) as No. (b) above.

28. (a) Three masas of ganja, which costs 4½ pies.

(b) Two tolas of ganja, which costs 3 annas.

29. (a) Ordinarily, tobacco is mixed with ganja for smoking. (b) Exceptionally, the habitual, excessive ganja-smoker mixes with it the seeds of "dhatura" and "kuehla" (nuxvomica).

The object of these admixtures is to give ganja more intoxicating power.

I have not heard of "bhang massala" being sold in the bazar in this district. But the following ingredients are usually mixed with the "summer beverage" called "bhang":—(1) Sugar, sometimes "gur" (treacle); (2) almonds; (3) raisins; (4) khaskas (poppy seeds): all these are ground finely in milk or water, well strained, and added to "bhang," in order to give the beverage a flavour and zest. Some spices are also added to it, such as nutmeg, cardamom, etc. This is the Indian home-made liquor which is in special favour with all communities of Hindus.

30. The majority of ganja smokers smoke it in company. Those who smoke 4½ pies worth of ganja smoke it in solitude, if they have nobody at hand to join them. Generally, the male sex are addicted to this vice, but the wives of bairagis and gosains also smoke it. It is also to some extent smoked by kaikadines and prostitutes. Ganja smoking is generally commenced in the prime of life, say, at 20. Children are generally given the beverage called bhang. The sweet called majum is sometimes used by them, as also ganja, which is used by them in a preparation called "chivda." But the latter is done very occasionally.

31. Yes, the habit of smoking ganja, drinking bhang and eating of majum is easily formed. Almost all evil habits are easily formed. It is not difficult to break off the habit when it is newly formed. Bad habits are more easily nipped in the bud than at any other time. Yes, there is a great

tendency for the moderate habit of ganja-smoking bhang-drinking and majum eating to develop itself into the excessive. There is no evil or bad habit that I know of that does not develop itself into extreme degrees. Things go from bad to worse when they are not properly attended to or looked into.

32. So far as I am aware of, no social or religious custom requires the use of ganja-smoking. But the beverage called bhang, and the sweet called majum are customarily used at certain festivals and in certain places of India, as for instance at Durga Puja and Holi. At Chanda the Chamars use "ganja dust" in the preparation of a beverage called gulabpani, which is drunk at a ceremony called "dadhi" (the first shaving of beard) when no liquor is permitted.

33. Ganja-smoking is considered very disreputable, but not the other uses to which it is put, as using it in "vadas," "bhajas," "chivdas," etc. The religious sentiment of the Muhammadans is unerringly against ganja-smoking, as it is against the use of all intoxicants. No such religious sentiment exists amongst Hindus against the use of narcotics, as there is against the use of alcohol. But both Hindus and Muhammadans, as well as other religionists, consider ganja-smoking as bad and lowering, on account of the disastrous effects it produces on the physical and mental faculties of the smoker. "Ganjadi," "affeemohi," "maddatti" are well known abusive and disgraceful epithets, used against idle and inactive moods and idiotic actions on the part of an awfully careless man.

34. Gosains and bairagis, jogis, fakirs, and the poor labourers can ill afford to forego the use of ganja-smoking. The reason is that the use of it is not prohibited by religion in the case of Hindus, and ganja is so cheap compared to the price of liquor.

Majum-eaters, bhang-drinkers, and the occasional pleasure-seeker would feel the loss of it, as it is the only cheap, intoxicating drug that they can use without incurring the displeasure or odium of their co-religionists.

35. I do not think it feasible to entirely prohibit the use of ganja, bhang or majum all at once. I should think it would be illicitly consumed. The prohibition of any of these drugs could only be enforced by drastic measures which I am loath to recommend. I am inclined to think that the prohibition would occasion great discontent and lead to political danger. Bairagis, gosains, jogis and fakirs would constitute themselves into leaders of the rebellion if ganja smoking was prohibited.

The higher class Hindus, bairagis, gosains, jogis, and fakirs would certainly not resort to alcoholic stimulants, for they are prohibited to use them. In their extremity they would have recourse to opium and its various preparations, such as maddat and chandu.

36. I do not think that alcohol is now being to any extent substituted for ganja, bhang or majum, for reasons already given in my previous replies. But, on the contrary, I fear there is great danger of liquor-drinkers being driven to the use of ganja on account of its cheapness. Causes—(1) the labourers receive poor wages; (2) ganja is comparatively cheap; (3) the consumption of ganja is annually increasing in the Central Provinces and in the Zamindaries and Feudatory States of the Central Provinces.

37. Charas is not imported into the Central Provinces, and so I am unable to give any opinion as to the relative effect each drug produces on the consumer.

38. Cannot say, for only one kind of ganja is utilised in these provinces licitly.

39. Ganja-smoking is considered very injurious. Bhang drinking is considered most beneficial to health. Majum-eating, prepared with ganja, is considered less harmful, as also "yakuti" and "panjari."

40. Yes, very rarely. Bhang is administered to bullocks to allay fatigue and weariness sometimes. But generally the water of fermented "mohawa" called "goda" is given.

41. It is said that bhang is most beneficial in its effects as—

(a) a food accessory or digestive;

(b) to give staying-power and to alleviate fatigue.

(c) Ganja is used as a preventive of maladies arising from impure water in malarious and unhealthy districts. Hence its extensive use in the Zamindaris and Feudatory States. But the moderate use of it is abused when it leads into excesses.

Mostly Marwaris, Dakhni Brahmins, Kayasths, etc., use bhang for the purposes of (a) and (b). The rural classes use ganja for the purposes of (c). I refer to both.

42. I have already said that the use of bhang is considered beneficial and harmless. See for reasons, answers to question 41. Ganja smoking, either moderately or excessively, is considered pernicious to the human system. The habitual use of it is said to weaken the intellect and to ruin the constitution.

43. They are not troublesome as liquor-drinkers are. The latter talk much and pick up quarrels, while the ganja smoker dozes off into sleep, or is found in an indifferent or empty mood.

44. It is said that ganja produces immediate intoxication. Bhang is considered to be a refreshing drink which produces gradual intoxication and hilarity. It produces appetite. The after-effects are not bad. This is extensively used in the hot season. The after-effects of ganja smoking are said to be very unpleasant, and the want of it produces uneasiness in the case of an habitual excessive smoker.

45. (a) These noxious effects are not immediately produced, but they gradually tell on the physical, mental and moral faculties of man.

(b) Ganja smoking impairs the constitution of a man.

(c) Yes it does, I am told, in the case of an excessive habitual smoker.

(d) Sometimes ganja does produce these maladies.

(e) Ganja smoking does, I am informed.

(f) Ganja smoking, it is said, deadens the intellect and is a potent cause of insanity.

47. The habit of ganja smoking is not hereditary in the same sense as some diseases are, which descend from father to son. It is very highly probable that the child which constantly observes its father from an early age smoking ganja, would acquire the vicious habit from mere association of parental acts, which may tend to good or bad. But I have heard it said that the physique of a habitual moderate consumer of ganja is more or less affected.

49. (a) Yes, it is so used.

(b) Yes, sometimes.

(d) Ganja smoking is said to eventually produce impotence.

50. Excessive ganja smoking accounts for most of the Hindu sadhus leading such hard and celibate lives.

53. I know of one case in the Chanda District.

54. Rebels are said to have done so during the time of the Mutiny.

55. I am informed that sometimes it is so done and that an inexperienced man can be completely stupefied by the smoking of ganja without any admixture in it.

56. With admixtures, an inexperienced man will fall an easy prey to the thief.

I am informed that gosains, bairagis, etc., mix dhatura with ganja for the sake of greater intoxication.

58. The excise administration, so far as I have read, appears to be good so far as ganja cultivation and export are concerned.

62. From the information that I have gathered I think the restrictions on the cultivation of ganja should be increased and those on bhang should be relaxed, for the latter is considered to be the lesser of the two evils.

63. I have objection to the retail vend of ganja in this district. The system of allowing temporary and cheap ganja shops affords greater facilities for the procurement of ganja easily and at a cheap price in out-of-the-way places. This is throwing temptation in the way of poor and ignorant people in rural towns, where no sort of opinion prevails and where every one is master of himself and feels as free as the air. Temporary shops should therefore be abolished.

65. The taxation of ganja, with reference to alcoholic intoxicants, is very much less; 4½ pies worth of ganja produces the same, if not more, intoxication as one anna worth of liquor. The duty on ganja should be raised. The price of one masa of ganja should equal the price of one bottle of "rasi," which costs one anna. The Municipalities should be allowed to levy octroi on ganja that is brought in for home consumption. This will serve many useful purposes.

66. If these three different sorts of ganja have different uses and effects, then the taxation must vary. This ought to be done on the score of its being a distinct article used for a distinct purpose.

68. In this district no houses are licensed for smoking ganja. The retail ganja seller does not move from one place to another in the same town, but sits and sells ganja in the same place where he first starts business. I am not aware if any such condition is laid in the permit that is granted to him at the annual sales of retail vends. In Chanda two permits are given to the retail vendor for selling ganja in two localities of the Municipality, the town and Jatra.

69. In this district the wishes of the people are not consulted, but when the people of their own accord make any objection, then it is considered by the Deputy Commissioner. No measures whatever are taken. I think local public opinion ought to be invited by beat of drum when a ganja shop is to be opened in any locality of a town.

70. The Nizam's territory and the Hyderabad Assigned Districts are contiguous to the Chanda District, as also Bastar close to Sironeha, which latter is a tahsil of the Chanda District. In these

places the restrictions on the cultivation, sale, and price of ganja are not so stringent as in the British territory, and there is great possibility of its being smuggled into these provinces.

67. Evidence of the REV. A. G. DANIELSSON, *Missionary, Chhindwara.*

29. Many mix ganja with tobacco for smoking. A sweetmeat or drug is made of the extract of hemp mixed with sugar and is called majum. I am told it is often served to guests at social gatherings after the meal, and that it causes a pleasant intoxication.

32. Many Hindus smoke ganja, because their god Mahadeo was in the habit of smoking it.

35. (a) Yes.

(b) Of course those addicted to it would try to get it.

(c) By forbidding the sale of them except for medicinal uses.

45. Yes, it produces bronchitis, asthma and cough owing to that smoking of ganja consolidates the lungs. It seems to weaken the intellect and make the consumers very dull.

49. Yes.

68. Evidence of the REV. O. LOHR,* *Medical Missionary, Bistrampur, Raipur District.*

1. I have resided in the country as a missionary from 1849 to 1857 in Chota Nagpur, and from 1868 up to date in Chattisgarh. I have practised medicine all these years, and have occasionally made enquiries among the people about the use of drugs.

2. As far as my experience goes, the only form of this narcotic used is ganja in these parts. Bhang is occasionally used as an exception by foreigners from the North-West Provinces. I have never come across any person using charas. I shall speak only of my acquaintance with this narcotic in Chattisgarh, as my knowledge of the use of it in Chota Nagpur is too remote to be of any certainty.

3. I have never come across any instance in the Raipur and Bilaspur districts (which are the only ones I have knowledge of), where I have seen the plant growing spontaneously.

4. The plant is only known under the name of ganja.

5. Not having seen the wild plant growing anywhere, I cannot tell.

6. See question 5.

7. Not at present. About 20 years ago, I used to see it growing in the gardens of Gonds. There is scarcely any grown now. Formerly it was cultivated for ganja alone being produced. I have seen it in both the Raipur and Bilaspur districts to a very small extent; but I believe that now it is hardly grown at all on account of its cultivation having been since prohibited.

8. See question 7.

9. As far as I know, no particular care was taken for its cultivation, and there were about 10 or 15 plants in the gardens where I saw it grown, seemingly only for the use of the owner.

10. See question 7.

11 and 12. I do not know.

13. It is prohibited entirely. I cannot tell (last question).

14. Not to my knowledge.

15. I have no knowledge regarding these matters.

16. In the few cases I knew of, the ganja was prepared by the consumer for his own use. This was years ago.

17. By Gonds formerly. None is made now.

18. I do not know.

19. I have no acquaintance with charas or bhang. I can only speak of ganja. Ganja is in these parts only used for smoking. Bhang is used by the high caste people, I believe. I can only give evidence regarding ganja.

20. Foremost are the Gonds and bairagis, Rawats or Gwalas, and Pankas; in a smaller degree, Telis and Kurmis; and in a still less degree, all other classes, even Muhammadans. The only exception are the Chamars, amongst whom only one per cent. (about) indulge in the drug. All over the districts.

21. The flat kind, locally called "kali," is invariably used, and with it the chur or broken ganja.

22. Charas is not used to any extent.

23. No.

24. Bhang is, I believe, used by the up-country Brahmins and Banias chiefly as an aid to digestion; but only to a small extent.

25. The use of ganja is, I think, on the increase. I can give no reason for the increase, unless it be the increased prosperity of the people and greater facilities for obtaining it.

26. The cases I have come across were and are chiefly habitual moderate consumers; there were a few habitual excessive consumers, and very few of the other two classes.

27. The persons indulging in the drug (ganja) are mostly such as lead an idle life, like bairagis, Gonds, beggars, and Rawats, who follow cattle and dance a great deal.

28. A moderate habitual consumer will use from 1 pice to 1 anna's worth a day, and habitual excessive consumers will use up to 4 annas worth a day.

29. Tobacco is sometimes mixed and smoked with ganja. I have come across no cases of dhatura being so used. I do not know of any preparation such as bhang massala.

30. Ganja is smoked about here in the same way as tobacco is, and only by male adults. It is not usual for children to use it. It is used more by middle-aged men than by others.

* Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

31. According to my experience, the habit is easily acquired but difficult to break off. Yes, there is such a tendency.

32. It is decidedly part of the religious orgies of the Hindu classes mentioned, and less so with Gonds. It is not regarded as essential; but is always excessive in such cases, and is likely to lead to a formation of the habit. It is injurious in such cases.

33. As far as I know, with indifference. There is no public opinion on the matter. I don't think it is in disrepute; nor are people who use it shunned more than users of tobacco are, except by the extreme temperate people, i.e., people who object to the use of tobacco, spirits and narcotics in any form.

34. Not to my knowledge. I have come across instances of people giving it up because of my advice, and no evil effects have resulted.

35. Since the people have been accustomed to use the drug (ganja) from time immemorial, prohibition would be very difficult, and it would be consumed illicitly. I think prohibition would lead to political trouble, and would be followed by recourse to alcoholic stimulants and other drugs.

36. In my opinion the two habits keep pace together. I do not think alcohol is being substituted for the drug, nor the drug for alcohol when both are obtainable; but when one cannot be obtained, the other must and will be indulged in.

37. Not knowing anything of the effects of bhang or charas, I can only confine myself to giving an opinion about ganja.

38. I cannot say.

39. As far as I know, smoking is more injurious than any other form of indulgence in this drug, for in all the cases of attempted suicide and delirium I have come across from indulging in the drug, smoking has been the cause.

40. I don't remember. I never heard of such use.

41. I do not think it is beneficial, except in moderation, as an aid to digestion. In cases of fatigue, and so on, the effect can only be temporary. It may be soothing and act as an inducement to sleep. I do not think it is useful in any other way, as smokers are attacked by fevers, etc.

42. If a person indulges in this drug, the moderate use may be beneficial to the health; but as the system becomes accustomed to it, the dose must be increased, and therefore the habit is liable to become a baneful one.

43. Yes.

44. It is first exciting, then soothing, followed by slight intoxication when used moderately; in a less moderate degree of indulgence it causes merely temporary excitement. It is said to create appetite. It lasts only about an hour, and there are no after-effects, except an inclination to sleep. A longing for more is produced.

45. (a) Yes, to some degree in all three senses.

(b) Yes, if continued.

(c) Not in moderate quantities.

(d) Not to my knowledge.

(e) Yes, it induces laziness and immorality.

(f) It deadens the intellect, but does not induce insanity if used moderately. If used immoderately, it induces temporary insanity. Yes; the pupils are dilated, sensibility is diminished, there is delirium of a boisterous nature, followed by sleep. I never met with such a case.

(g) I do not think so.

Never having kept histories of such cases, I am unable to answer this question satisfactorily.

46. I have answered this question in the above.

47. I have not ascertained this fact; but I think in a great many cases it is hereditary. I do not think the children are in any bad way affected. I have seen very intelligent children of habitual ganja-smokers.

48. I should answer this question as above.

49 and 50. I know it is an aphrodisiac; but I do not know if it is used for that purpose, having had no experience in this matter.

51 and 52. I have no experience in these matters.

53. In my experience, the immoderate use of ganja leads to suicide, but not to any other crime.

54. I do not know.

55. I have had no such experience.

56. I never came across any such admixture. As far as my experience goes, the pure ganja is always used.

57. I have never come across any such cases. Ganja is always smoked about here.

58 and 59. I am not acquainted with these matters.

60. Ganja is not produced here now.

61. I do not know anything about charas.

62. See above.

63. See question 58. I do not know anything about its wholesale vend; but think the retail sale should be restricted rather more than it is, as now it is accessible to all classes of persons, even children.

64 to 66. See question 58. I know nothing about this.

67. See question 58. I know nothing about this matter.

68. Not as far as I know. I do not think such houses or shops should be allowed.

69. I do not know anything about this, as no such wishes have been expressed to me, nor have I been asked. I don't know. I think in most cases this would be desirable.

70. I know nothing about these matters. I regret I can give no further information on these matters as, owing to failing health within the last few years, I have not paid much attention to them. I think, however, the sale should be still further restricted, as the vice is increasing.

69. Evidence of ADHAR SINGH GOUR, *Kshattri, Barrister-at-law, Hoshangabad.*

1. Mixing with the people and observing their habits during the last 30 years.

2. Yes. The older leaves and fruit-vessels. It is also called *Verbesina prostrata*. In some parts the very tender parts of the plant without the stems make bhang.

The female flowers are unfertilised. Their agglutinated tops and the resinous exudation on the same forms ganja. Flat ganja is used in these Provinces. Round ganja is hardly known.

Yes. Ganja is also called *sulpha*. Bhang—Buti or Mahadeo-ki buti, also bijia, sabzi or sabje. Charas is neither used nor produced. It is known by the name of *momia*, which is, however, a different article.

3. Not in any that I know. Each house in the country has its rubbish heap next to it, whereon all the sweepings from the house are piled. The ganja plant grows sometimes from the bird-rejected seed on these, not only spontaneously, but luxuriantly. I believe it is quite wild on the Western Himalaya and Kashmir, and also in certain parts of Bengal. The wild plant, however, yields no ganja.

4. Has no other name. The Arabic name for this drug as well as the plant is *kinnab*, which is probably a corruption of *hennep* (Dutch), which seems to be the origin of the English word hemp.

5. The plant that grows in the mountains at an elevation of 6,000 to 10,000 feet, yields a very good fibre, which is utilized for making ropes and even garments. It also produces charas, which the plant grown on the plains does not. The resinous substance of this latter apparently enters into the female flowers and twigs, and thus imparts to it that narcotic quality for which it is prized. The plant is as high as the Ambari (flax) plant, i.e., 10 to 12 feet.

6. It is said to be as dense as that of wild indigo.

7. Yes, in Khandwa and Katol, for ganja, which is supplied to the whole of the Central Provinces and to North-Western Provinces.

8. I do not know.

9. The plot of ground assigned for the cultivation of the plant must be moist, having a rich friable loam. It must be ploughed from 6 to 12 times and all the weeds on it thoroughly eradicated. It should be covered with fresh earth mixed with cowdung for 5 or 6 days and then ploughed again. After this, the rains setting in, the field is well flooded and after being ploughed and harrowed, ridges from 9 inches to 12 inches in height are thrown up, the space between any two ridges being 1 foot in breadth. On these ridges the seed is sown 6 inches apart, or the seedlings from a nursery transplanted. In October the ridges are opened out and manured with khali (oil-cake) and cowdung. About November the process is repeated and the lower branches cut off. Now all the female plants, as they are called, but really the male plants, are cut down, as the presence of a few of these destroys the narcotic growth in the female plants.

10. No; not a special class. They are ordinary cultivators. The cultivation of the plant is not looked down upon as of the Indian madder, *Hedyotis umbellata*.

11. I cannot say.

12. I do not think it is.

13. Yes; to Khandwa and Katol Tahsils of the Nimar and Nagpur districts. No, hemp will grow anywhere in the province, not because it accommodates itself to all climes and situations generally, but from my knowledge of the province I should say that there is not a district which would not favour its growth.

14. Yes; only ganja. I cannot say to what extent.

15. Cultivated ganja (a) —The stems of the female plant are cut about 6 inches from the ground and are tied together in convenient bundles. They are exposed to the sun for about 5 or 6 hours and to the dew for a night. They are then laid upon a mat and trodden by men so that the flowering heads are pressed down in 3 or 4 minutes. Another layer of the plants is again placed upon it, and so on until it attains the convenient height for treading. Every second and subsequent layer, however, is so disposed that the flowering tops charged with resin do not fall upon the tops of the first laid plants. This heap of plants is then turned upside down and the leaves and fruits, if any, shaken off. The whole stack is covered with mats and the treaders sit upon it to press it to the requisite strength. The cracking of the stems generally governs the amount of pressure that is applied. Each twig is then separated and trodden upon in order that the resin may well enter the flowers and become part and parcel of the same. It is then stored with the tops in. It should be noted that when the ganja dries, certain portion of it, that was either not perfectly mature or which was trodden too much, falls off. This is called gada (powder or dust), chura (crushed), rora (picked up). This is said to be less intoxicating than the other ganja.

16. Yes; bhang is obtained chiefly, if not entirely, from the wild plant. It consists wholly of the mature leaves, and but rarely of fruits as well. This is called dudhia or duba or Ujjeni bhang, because coming from Ujjen, and is considered much superior to the bhang that is obtained from the ganja-yielding plant. But bhang that comes into these parts from Marwar is supposed to be the young leaves and twigs derived from a semi-wild hemp plant. The wild plant is believed to be specially rich in charas, but it produces ganja which is considered to be very poor, because the intoxicating property, instead of centring in the flower tops is equally distributed over the plants, the leaves having the most of it.

17. The only preparation that is really made in these provinces of the hemp drug is majum (majun), which is made thus: Take one seer of leaves of ganja and one seer of ghi, mix the two together, and boil the same in two seers of water over a slow fire until the water assumes a greenish or brownish colour. Take down the decoction and pass it through a piece of tat (gunny bag), throwing away the coloured water and the leaves boiled. Press the ghi then from the tat and mix it with chasni (syrup), adding, if you can afford it, cardamoms, pistachio-nut, cocoanut, saffron and like spices, and making it into small cakes. It is believed that the ghi extracts the narcotic principle. The Moors call it *el mo-qui* and the Arabs *dawa mese*.

18. Ganja does not keep for more than 12 months. Its greatest enemies are the rains, when the resinous matter undergoes apparently a change, which, while it diminishes the narcotic property,

makes it altogether unwholesome for human consumption, though it is said to be good for medicinal purposes in the treatment of cattle and horse. The leafy part assumes a greyish tint and the resin, containing definite carbon compounds, is weakened. If the room in which it is kept be kept dry and warm by artificial means, it could be made to last for another 12 months. The room should be well ventilated, and should not have any stone pavement. People now keep it hermetically closed in a common earthen pot, in the mouth of which is kept a small quantity of cotton. The mouth of this pot is then covered over with saj or teak leaves and well plastered over with mud, which is made to dry in the sun before the pot is consigned to its final destination.

19. I know nothing of charas. Ganja is used only for smoking.

20. Labouring classes that work out in sun and rain, particularly in jungly and swampy places. Bairagis, sanyasis and other ascetics use it freely wherever they may be.

21. Only flat ganja is used in these parts. There is also another kind of ganja, called pattar, that comes from Holkar's territories or rather is smuggled.

22. I do not know if charas is at all used in these Provinces.

23. No, for the simple reason that it contains the least resinous matter which is the active ingredient in producing intoxication.

24. Bhang is consumed generally by well-to-do people. Chaubes of Mathura and Marwaris seem to patronize it particularly. It is more largely consumed during the hot months, as it is believed to be cooling and digestive. Poor men and men of business do not, for one thing, patronize this bhang, as it requires quite one hour's time before it can be made; whereas ganja ball can be prepared for the chillum (pipe) in about one-fourth the time; indeed it can be made while the maker is attending to his usual work.

25. I am not able to cite statistics on this point; but the lower class of people who consumed liquor before have taken to ganja, because liquor has become expensive to them. This is the general reason given by persons who are questioned on the subject; and there seems to be some truth in it.

26. I would not answer this question, as I have not been able to collect correct statistics.

27. Mendicants, domestic servants, black magicians and all orders of ascetics. These classes of people are as a rule ill clad. They think that the use of the drug fortifies them against the extremes of weather. Bairagis and sanyasis use it because it enables them to meditate properly. Debauchees use the drug as they think it is an increaser of pleasure. Poor people, because it is an assuager of cares.

28. (a) One pice worth.

(b) Two annas worth.

29. Ordinarily tobacco is mixed with ganja in the proportion of $\frac{1}{3}$ to $\frac{2}{3}$ ganja. Exceptionally cardamoms and otto of roses or other otto. Yes. Dhatura seed is sometimes smoked with ganja, when the latter fails to give requisite intoxication.

Bhang is seldom or never drunk alone. Bhang massala consists of the following:—(1) black pepper, (2) sonph kasini (*Faeniculum panmorium*), (3) dora (large cardamoms), (4) gulab ka-phul (rose flower), to which, if circumstances permit, other things are added as kesar (saffron), gul

khairu (hollyhock), badam (almonds), etc. The secret of intoxication consists in the fact that bhang and this massala must be kept in water for about an hour, and then the whole thing well pounded for two hours at least, before it is strained. When strained, sugar and milk are added to it.

30. Ganja or bhang are generally used in company. One always notices a few *dambhais* associate smokers clustered round a devotee; and during the hot months it is quite a common practice for a few friends to get together and go out to a garden for a pic-nic or on the banks of a river, when each man gets his share of a lota of the aromatic bhang, which is prepared on the spot. Not necessarily confined to male sex, but women of any respectability have nothing to do with either, even on festive occasions. I have not seen many children use ganja or bhang as a rule, but on certain occasions persons of tender years do drink bhang. Boys attached to devotees, however, learn to smoke and drink as soon as they become members of the fraternity.

31. Yes, it is. Yes, it is difficult to break off. I have certainly noticed this tendency.

32. No body, who is not addicted to it, touches ganja, even on feast days; but the case is different with bhang, for one may use it on occasions of marriage, Holi, Dewali, Shivratri, Sawan, Dasahra, Nauratri, etc., when he would not touch it on other days of the year. On these occasions particularly the habitual consumers add to it the root of the jwar plant, about 6 mashas in weight and less, generally kaner ki jar (the root of oleander) which makes the beverage very intoxicating indeed. Bhang is sacred to Mahadeo, one of the gods of the Hindu Trinity, which is represented as always under its influence. It is, therefore, classed with *soma*, which is one of the five plants which liberated human beings from all their earthly sins. It was, say the devotees of the destroyer (Mahadeo), one of the nectars which was given to man when the gods churned the ocean. It is not essential, but the staunch worshippers of the Mahadeo make it their duty to drink bhang on the days which are sacred to that god, if only on the pretence that it enables them to concentrate their attention to the worship of that god. The use of bhang on such occasions is temperate, so far as the novices are concerned. To the ordinary consumers, it is a day which affords a sound excuse for extra strong libation.

As these religious observances are not few and far between in the Hindu calendar, I am certainly of opinion that even this occasional use leads to the formation of the habit, which ends in ruining the so-called devotees of the god.

33. A man who smokes ganja is looked down upon even by persons of his own social standing, much more so by persons above him. Bhang-drinker, however, is not in such a bad repute.

The reasons appear to be that a ganja-smoker is almost always easily excitable, is not amenable to reason, is ever disposed to quarrel, even with his best friends. He is an uncertain friend and a bad enemy, for once he resolves to do a thing, no matter however wrong, he does it at all hazard. The bhang-drinker is, on the other hand, quiet and forbearing, more so than the ganja-smoker is.

I am not aware that the hemp plant is ever worshipped, though I know when persons begin to tread it in process of its manufacture they reverentially join their hands and bow respectfully to the heap which they are about to tread.

34. Supposing that the population of the provinces is 18 millions or 6½ millions males, and the classes who generally consume this drug are in the following proportion in the Central Provinces:—Males—Devotees 40,000, musicians 3,000, and labourers 29,000; and supposing also that to about half of these numbers the drug has become necessity, it would *prima facie* appear that the devotees would feel the privation, as by mere force of habit they have come to connect the subduing of their animal appetite and the abstraction of mind to this drug. Musicians think that it clears their voice, and the labourer is able to brave the inclemencies of weather, once he is fortified with this drug.

35. Yes, the cultivation of ganja should be stopped altogether. A heavy duty might be levied on bhang and charas. I do not think then that there is any fear of illicit consumption.

A certain amount of discontent would certainly arise, as the persons consuming the drug belong generally to that illiterate class who take a very long time indeed before they see what is good for them. I do not think that this discontent will breed any political danger, for the simple reason that the consumers are men of no influence, and all right-minded men look upon the consumption of this drug as fraught with deterioration of the national intellect. The lower classes will take to liquor; but the higher classes will seek for its substitute in vain.

36. No, because alcohol is much too expensive. For my part I should like to see liquor cheapened, particularly in wild and jungly parts of the province. A Gond, when he has a whole day's out-work in sun and rain, really wants a glass of liquor after that to prepare himself for the work next day. Liquor, to which he has been used for generations, does him no harm, as in majority of cases it is used in moderation. No length of familiarity with the drug under notice will counteract its evil effects, however, even when used in moderation.

38. Round ganja is more intoxicating from the fact that it contains a larger amount of resinous matter, and a great many twigs and leaves which will be good enough for the flat ganja are thrown away in the manufacture of the round ganja.

39. No; although a little tobacco is mixed with ganja, its evil effects are in no way mitigated. The case is different slightly with bhang, as the proportion of massala that is pounded with it is about 70 per cent. and to a chhatak of bhang about two seers of milk and water are added. A bhang drinker takes some time before he gets really intoxicated, and he is under its influence longer than the ganja smoker is. The admixture of tobacco is necessary, as without it ganja can hardly be smoked with comfort.

40. Susruta, a book on medicine in Sanskrit, says that the drug is a good medicine for getting together the phlegm in the larynx and ejecting it.

41. (a) to (c) No.

Fishermen, graziers, agricultural labourers and generally those who have out-work in cold and rains. They use ganja only moderately as a habit and for the purposes indicated in the question, but I think these poor people have simply been told that ganja is good for so and so, and they use it without ever troubling themselves to see whether its use is doing that good to them for which it was prescribed. That it does not give them staying-power I judge from the fact that the use

of the drug is essentially accompanied with tingling and numbness of the active members of the body and a physical insensibility, as in the case of monkshood.

42. I certainly think that even the moderate use of ganja and bhang injures materially the consumer. He suffers in body if he is not able to have to eat milk, ghi and oily substances generally. He almost invariably suffers in mind. He becomes such a conspicuous object that I do not know if I have ever made a mistake in finding him out from a crowd of people. He is sharp tempered, very easily excitable, morbidly sensitive, quarrelsome, and becomes quite apathetic and an easy prey to disease.

43. No; they are as a rule very disagreeable, and of the many persons I have seen I cannot bring one to my recollection regarding whom I could record a favourable opinion.

44. Excessive use causes excitement which is succeeded by narcotism. During the initial stage he gets some, what he calls pleasurable, hallucinations. He is then generally quiet, or laughing immoderately and singing loudly and incoherently. This stage is followed by perfect inactivity. It is not refreshing, and it does produce intoxication of the worst type imaginable. The individual who uses bhang in moderation will often assure you that were it not for that, his appetite would be nothing. I am, however, of opinion that this is simply a make-believe of his, and that if he does really feel as hungry as a wolf after a potation of the kind, what he ascribes to bhang is due to the virtue of the massala used with it and not a little to the pleasant surroundings attendant upon bhang parties.

To the last question my answer is "both."

45. Certainly, my idea of an average ganja-smoker is that he is a skinny, shrivelled, bare-boned individual, worn to a shadow, and that of a bhang-drinker a veritable Rip Van Winkle, probably not so weak-looking as the ganja-smoker but a candid waiter on Providence. I have never seen either of these individuals what I should call good eaters. They show, however, a decided partiality to things made with sugar and ghi. A ganja and bhang smoker is always a prey to asthma, pre-eminently the former. The action of the drug, when used in excess, is originally upon the brain and the spinal marrow, and secondarily upon the stomach and the bowels, which are as a rule irritated and inflamed. It, therefore, injures digestion and the normal appetite fails. Barring a certain class of persons who use it occasionally for the purpose of sexual pleasure, it deadens the finer feelings of those who without it would have been perfectly straight and moral persons. In a very great majority of cases I have noticed that persons who could really be called intelligent have not only become perfectly stupid but insane. The insanity is temporary, but if a person once cured uses it again, insanity appears again, and it is then hard to cure it.

46. I would not be wrong if I say that our lunatic asylums would be found to have persons, 35 per cent. of whom were victims to this drug. The symptoms are dilated pupils, black lips, offensive breath and vacant look, also muffled, hoarse, husky and sometimes nasal voice. That the brain is affected is apparent from the fact that when a ganja-smoker or a bhang-drinker talks to you he is obliged to shake his head to arouse his brain nerve, which becomes inert, if not diseased and incapable of acting as when in a normal state. It follows from what I have sub-

mitted that when ganja works such a change on a perfectly healthy brain, its work on the brains of persons who are troubled with mental anxieties or worries must not only be precipitate but certain.

47. I cannot say that it is a hereditary habit—indeed the son of a ganja-smoker is known to eschew the drug. The evil effects are not seen in the progeny unless such progeny be begotten when the father was bordering on insanity.

48. Bhang-consumers do only transmit to their progeny the weakness of their body and the eccentricity of their minds.

49. There are two theories about the use of the drug for this purpose: one is that devotees use it for the purpose of destroying their sexual desire and they therefore begin to smoke or drink it from the very early morning before they had had a morsel of food. The debauchee uses it a little before the requisite time. Both these classes are obliged to carry it to excess, as it has not the desired effect when used in normal doses after a time, and whilst the former succeed in attaining their object, the latter is soon played out and becomes irrecoverably impotent. The reason why the devotee is able to achieve his object need not be told, and the reason why the chartered libertine collapses is due entirely to the excessive use of the drug which can help him only for a time to excessive venereal indulgence. The drug is also used by the prostitutes, but not for the purpose of sexual pleasure, but just the reverse: their object is the same as that of the devotees and to stop procreation.

50. The answer to the last question is the answer to this. I am simply touching on the subject of ganja and bhang and not charas.

51. The people of India are proverbially law-abiding, much more so are the illiterate class. Ganja imparts them with temporary boldness for the commission of crimes. I have reasons for thinking that all criminal classes more or less indulge in this drug, and but for this drug few would make up their minds to break the law. I had one or two cases in which confirmed ganja-smokers evinced decided intention of homicidal violence, and in one case a confirmed smoker killed his own child.

52. The above applies to ganja and bhang.

53. Yes, it does. I have already stated that I know of one case only.

54. Yes.

55. Yes.

56. This has already been answered before. I will here simply quote the famous lines of Pope (translation) on the drug, as they express exactly what the people who use it think of it to-day:—

Meanwhile with genial joy to warm the soul,
Bright Helen mixed a mirth-inspiring bowl,
Temper'd with drugs of sov'reign use t'assuage
The boiling bosom of tumultuous rage.
These drugs, so friendly to the joys of life,
Bright Helen learn'd from Thone's imperial wife;

Who swayed the sceptre where prolific Nile
With various simple clothes the fatten'd soil
From Pæon sprung, their patron god imparts
To all the Pharian race his healing arts.

57. I do not know if this is done.

60. I have not studied this subject, and there is no time to do so now.

61. No charas is imported.

62. No, I do not think it could be controlled.

63. No, in general.

64. No.

65. The ganja is much too cheap. It ought to sell ten times as dear. Its cultivation should be improved, and I am of opinion that it is just possible by proper cultivation to make it less deleterious. In the labouring districts liquor should be much cheaper.

66. Not for Central Provinces.

68. No such houses are licensed that I know of.

69. Yes, it should be, but it is impossible to supply the legitimate wants of the people without establishing too many shops, as the consumers of the drug are pretty equally distributed.

70. The Bhopal and Holkar's, also Sindhia's territories, march with Central Provinces, and it is without the least difficulty that ganja is smuggled in.

Oral evidence.

Question 1.—A good deal of my information is derived from books.

Question 3.—The plant is quite common on rubbish heaps in some places in these Provinces. I have not been out in the country for 9 or 10 years, but before that I used to see it frequently. If the plant is on an exposed site, it is pulled up. I did not pass the matter by when I saw the plant growing, but had it pulled up. I believe such growth is still common.

Question 25.—In travelling among the people, the Gonds especially, I have noticed that on account of the enhanced cost of liquor or distance of the liquor shop, people have used ganja instead. These causes were alleged by the people.

Question 35.—At the time of writing this answer, I did not realise how large an amount of foreign hemp drugs found its way into India. The prohibition of cultivation in India would be ineffectual in face of the free growth of the plant in surrounding countries. I therefore would withdraw the opinion I expressed. Bhang is not so deleterious as ganja, and I would not charge it with causing deterioration of the national intellect. People must have some sort of intoxicant, and the lower classes would substitute liquor for ganja if they could possibly afford it. The higher classes might take to opium.

Question 36.—For the hill tribes I consider liquor is better than hemp drugs. It has more sustaining power. I don't think other people require liquor. It is only in the localities inhabited by wild tribes, therefore, that I would care to see liquor cheapened.

Question 42.—I consider that even moderate use of bhang, as well as ganja, is injurious. I have seldom seen a really rational ganja smoker. They are excitable and stupid. I do not call a moderate consumer one who smokes $\frac{1}{2}$ of a tola a day. Ganja smokers are not, I think, confined to any particular class. I don't think the Lodhis take it more than other cultivators except in the Saugor district. An unusually strong man among them may not deserve my remark that no ganja consumer is quite rational. I don't think that the people would be better for total abstention from all

intoxicants. A moderate ganja smoker betrays his habit by his conversation. His lips bear evidence of his habit. They are blackish.

Question 43.—Ganja smokers are disagreeable in conversation and manner. They are quarrelsome. I do not include bhang in this opinion.

Question 46.—I get the figure from the work by Lyons.

An excessive ganja smoker has dilated pupils. I have particularly observed this. This symptom is apparent when the smoker is under the influence of the drug. The effect of dhatura is, I am told, exactly the reverse (contraction).

Question 47.—The opinion in the last part of the answer is based on my own observation. I remember three children of an insane father who were all insane. The father was an excessive ganja smoker. The same effect on the children would be traceable from a parent who was bordering on insanity of any other kind. I did not know the family well enough to say whether there were other cases of insanity in it.

Question 51.—I mean that persons, who but for the drug would not be disposed to crime, are encouraged by its use to commit crime. The majority of habitual criminals are consumers of the drug. Both the drug and the association with ganja smokers incite to crime. I refer to petty offences and not to homicide or murder in this answer. Offences requiring well-laid plans are not incited by the drug, though it may be taken as a preparation for carrying them out. In such

cases ganja is in fact taken to give courage. Bhang is not so used in this province. I committed the man who killed his child. The trying court held that he was demented by repeatedly incurring severe caste penalties, and acquitted him. The latter cause may have accelerated the derangement which was being caused by the ganja. The derangement did not amount to insanity until the caste troubles were superadded. He was not actually mad, or I should not have committed him. I did form an opinion from the wife's evidence as to the man's mental condition before his caste troubles came upon him. This is the only case about which I can give particulars. I was Magistrate for about 7 years. I went into camp in Chhindwara district for one month in each of the 3 years. I was Extra Assistant Commissioner there. I was less than 2 years Tahsildar, and 5 years Extra Assistant Commissioner. In Chanda I did not go into camp. I was 15 months at Damtari. I was also Deputy Inspector of Schools for over a year in Raipur. The rest of my service was ministerial. I resigned the Government service in 1887, and have been Honorary Magistrate ever since.

Question 55.—Complete stupefaction can be produced by the drug. I cannot give a case in which stupefaction was caused by pure ganja.

Question 65.—I think ganja is too cheap, because a man can intoxicate himself for so little as a pice. There is no other intoxicant so cheap. I don't think the drug could be made more popular by its quality being improved by cultivation.

70. Evidence of MR. TARA DASS BANERJI, President, District Council, Raipur.

1. As a native of a large village in one of the swampiest districts in Bengal, and a member of a household that was daily visited by large numbers of the surrounding population, and of which the head still exercised a sort of time-honored though illegal civil and criminal jurisdiction, I came to know almost every man in our neighbourhood, and a good deal of the manners and habits of each, at an early period of my life. Ours was a most backward people, and the distinction that now separates class from class by an insurmountable barrier had not yet crept amongst us.

After leaving college I was engaged in assisting in the management of a moderately large landed estate and some indigo and silk manufactories attached to it, which gave employment to hundreds of the labouring classes during the working season.

A good many of the people smoked ganja, and I often had to pay the week's wages into the hands of a wife, in order to save her children from suffering. In 1877 circumstances compelled me to leave home and take to my present profession in Raipur, where I have passed the last 16 years, trying to know the people and their ways as much as a life of hard work allowed. I know almost every malguzar and a good many of the tenantry of this district and the habits of a good many of them. I have some villages here of my own, and I know all my tenants personally, and the habits and character of almost all of them.

3. In my boyhood I have seen it grow on the dry beds of tanks in the Nadia district in Beugul. People called it "siddhi." I do not know if the seed was thrown there by any one purposely. But judging from the exposed locality of the tank,

I should think it grew spontaneously. It grew in thick clusters and looked luxuriant.

4. It used to be locally called "siddhi." In the up-countries it is called bhang and patti. I never saw it flower. People boiled and dried some of the leaves for use as bhang, but the greater part went to waste or were destroyed by cattle.

I should think light alluvial soil with plenty of moisture and heat favourable to its growth. I have never seen it grow on a high level.

6. I found it quite dense.

7. I have never seen it cultivated to any extent.

14. Not that I know of.

15. I have seen people plucking the leaves of the wild hemp "siddhi" and boiling and drying it, and subsequently either smoking it in a chillum or making a paste of it with spices, and either swallowing it as pills or mixing it with milk, sugar and water, and drinking it.

16. The people of the lower sort generally prepare it from the wild hemp as stated above. The better classes use bhang imported from the up-countries, that from Multan, or known as Multani, being preferred. I should think it can be prepared from the wild hemp.

I have never seen ganja or charas being prepared from the wild hemp except where I had suspicions of the seed having been planted by some local smoker in a conveniently secluded spot, but in such cases I found it to grow luxuriantly.

18. New ganja and old bhang are preferred. I should think like all other vegetable products they deteriorate by exposure to the damp air of

the rainy season, and keeping them in an air-tight place is perhaps the best way to save them from deterioration.

19. Yes for men. Ganja.

20. Ganja smoking is confined to the lower classes as a rule. When a man belonging to the better sort does indulge in it, he tries to keep it unknown to his neighbours, as it is considered disgraceful for a respectable man to do so. In Bengal the classes who indulge in it are generally boatmen, fishermen, mat-makers (domes), professional lathials (clubmen), factory hands, postal runners, petty shopkeepers, professional musicians, syces and mahauts, Hindu and Muhammadan fakirs, and in a less extent masons and carpenters. I believe the custom varies directly with the swampiness of the locality. The drier the climate the less the amount of the indulgence. It is not so easy to estimate the proportion of people of each class who smoke ganja. Of the fakirs and musicians it may be said that at least 50 per cent. of them indulge in it; of the other classes taken as a body 10 to 15 per cent. may be a fair estimate. In Bengal almost every man amongst the lower classes would not let the chillum go untouched if he can get it ready and free of cost, especially when he is about to do anything fatiguing or has caught a cold. Such men smoke more for the company than for pleasure, and a good many gradually get into the habit.

As for charas, in the Central Provinces I have never seen it used. In Bengal also its use is not very extensive, except perhaps in the swampy and malarial districts of Murshidabad, Purnea and Malda.

21. In Nadia the smokers prefer the varieties known as "Jessore" and "Balughar." I do not know where the latter place is. The smokers in Raipur prefer the flat, "kali" variety.

22. The Bengal people gave preference to the "Nepal" variety. I have never seen native charas.

23. Yes; Jatrawalas and worthless young men in the villages smoke bhang, but not to any considerable extent. A ganja-smoker run short of his stock, sometimes smokes bhang.

24. Almost every Marwari in Raipur and elsewhere drinks bhang in his "thandai" every evening during the hot weather. Habitual bhang-ers prefer to take it in pills which they sometimes dry up for use during travel or where they do not wish to take the trouble of preparing it every day. A good many people belonging to the other classes drink bhang during summer evenings "to cool themselves"—"thandai." Bhang is often used in the preparation of majum, a sort of sweetmeat, which is largely consumed during festive occasions like the Holi and the Diwali, and which is sold all round the year in large towns, the principal consumers being prostitutes and their visitors. Bhang is also used by native physicians—baidis—as a drug in the preparation of "módaks," emulsions for bowel and nervous debility.

25. I should think they are on the decrease, and the reason is not far to find. Wines and spirits were forbidden by the Hindu Shastras, and their use involved loss of caste. Pressure from within and without have alike contributed to the weakening of this sentiment. A good many of the castemen, as formerly would have taken to bhang and ganja, now drink wines and spirits. The lower classes, who imitate their betters, are gradually taking to arrack, gin, and cheap brandy.

It is as yet but a tendency, but I have no doubt that with increased heterodoxy ganja and bhang will lose still more ground to distilled liquor. There will, however, always be a class who from poverty or economy or religion will patronize the old drugs.

26. Taking 100 as the total number of ganja consumers, I should think that 75 per cent. are habitual moderate consumers, 5 per cent. excessive consumers, 20 per cent. occasional moderate consumers, (0) per cent. occasional excessive consumers; for bhang—10 per cent. habitual moderate consumers, 10 per cent. excessive consumers, 75 per cent. occasional moderate consumers, 5 per cent. occasional excessive consumers. I cannot say anything about the percentage of charas smokers.

27. Bhang is drunk occasionally, *i.e.*, during the hot weather moderately by more than 50 per cent. of the respectable classes of Marwaris, and during festive occasions by about 75 per cent. of them, of whom a good third take it in large quantities and get more or less drunk. The lower classes prefer smoking it, as thereby they avoid the elaborate and somewhat expensive items of spices, sugar, and milk. The habitual bhang-eri has his pills all round the year, taking an additional one perhaps on festive or mourning occasions. I have seldom come across a man of this sort, except amongst Purubia sepoys or Marwari Brahmins, without trade or profession.

The moderate and occasional drinkers are generally well-to-do tradesmen and bankers, who after finishing their day's work, bathe in the evening and enjoy their glass or cup of thandai.

Of ganja smokers it may be said that as a rule they belong to the lower classes and are looked upon as disreputable men even by the members of their own class. Men who from the nature of their work are exposed to the inclemencies of the weather, like the boatmen, the fishermen and the postal runners, take to it to mitigate the effects of exposure and of fatigue. Syces, mahants and clubmen and paiks take to it as they have very little to do and much time in their hands which they do not know how to dispose of. Petty shopkeepers in villages take to it as they have to wait in their shops the whole day and part of the night for custom which is not always very brisk. The intervening gap is well filled by a smoke which makes the time pass less heavily. I believe that irregular work, a life of exposure to wet and cold, fatiguing work and habits of idleness, and violent and lawless pursuits lead to a man's becoming a ganja smoker.

28. The moderate ganja smoker spends about one pice a day, and "bhang" without the ingredients which are usually mixed with it would cost less per head. I have known men to smoke four annas or more worth of ganja in a day, but these are extreme cases. An anna to two annas worth may be put down as the average cost of excessive smoking.

29. Bhang drinkers mix sounf, kali mirch, khas khas, kakri ke bij, gulab ke phul, gulbairi ke phul, allaichi, kawab chini, dhania, mithi lakri, badam, dudh, shakkar. This is bhang massala. Those who take it in pills use only kali mirch and one or two of the above. Those who smoke it do not ordinarily mix anything with it except a little of tobacco or guraku.

Ganja smokers, who can afford it, dip the ganja in rose water and put a few rose petals with it. First a little tobacco is put at the bottom of the chillum and on the top of it the ganja. Some people substitute the tobacco by "guraku."

Dhatura is mixed only by excessive smokers of their own free will. It is, however, administered with ganja for criminal purposes. The object of the mixture in either case is to procure inebriation.

I have given above the ingredients of bhang "massala." It is sold in large towns in Pansari shops in bundles; elsewhere people procure the ingredients separately and mix them themselves.

30. People of the better sort invariably smoke ganja in solitude; bhang is drunk as "thandai" more openly, but not in company in the sense that wine is drunk by Europeans in company except it be on festive occasions where young men drink it together in garden houses or "baithak khana." The lower classes do smoke ganja in company, I believe, more for economy than for talk.

Women, except the most degraded, seldom smoke ganja; a little of "thandai," I am inclined to think, does not come amiss to young married women amongst the Marwaris, provided it does not become known. Such cases are not many, and the practice is never habitual.

Children I have never known to smoke ganja or charas. A little "thandai" is given to boys sometimes during the hot weather months, especially in families of which the headman is a devout believer in its efficacy, but here also the cases are very few and seldom habitual.

31. The habit of ganja smoking is usually formed in youth, when the man falls into the company of smokers, who recommend it to the uninitiated for almost every kind of disease—from a simple cold to a bad case of diarrhoea. The novice is allowed and invited to smoke for a time free of cost to himself till he becomes a habitual smoker, and thenceforth he has to find his own drug.

The use of bhang seldom creates a craving for it. One can drink it for months and then shake it off in a day without inconvenience.

I believe it to be a question of the will power of the individual as to whether he should degenerate from a moderate to an excessive smoker or drinker. Something also depends on his surroundings, such as his means, regularity of employment, etc.; there are thousands of people who have smoked their two chillums of ganja a day for years together and have worked all the better for it, whilst some few become excessive smokers within a year of their initiation and become insane in another two or three years.

32. During the Dasera every Shakta in Bengal considers himself bound by religion to take bhang on the night of the drowning of the idol. From biting a single bhang leaf to getting dead drunk and remaining insensible for a day or more, with various stages of intermediate drunkenness or excitement result from this supposed religious inculcation, according to the age, education, social position, etc., of the devotee. People do regard it as essential. But now that orthodoxy is daily losing ground, the custom has weakened in a proportionate measure, and it is followed more for the excitement that it causes than for the spiritual benefit that it is supposed to confer. Generally, the quantity of bhang drunk, I believe, is not excessive. I do not believe that such a custom has any appreciable effect in the formation of the habit of bhang drinking. In the up-country and the Central Provinces, the Diwali and the Holi furnish occasions for the consumption of a good deal of bhang and majum, but I do

not think any religious inculcation is pretended to add sanctity to the license.

33. Occasional and moderate use of bhang meets with no social disfavour except it be with extreme puritans of the modern theistic schools. The use of ganja, on the other hand, is universally condemned as disreputable. The use of neither drug is condemned by the Hindu religion. Strict Muhammadanism condemns both, but even with them abstinence from these drugs is a moral not a religious duty. It is in the language of their Doctors a matter of "sunnat," not "fuz."

The ganja smoker is as a rule eccentric, short-tempered and slovenly. His hands are covered with corns—the result of daily kneading the drug in the palm of his left hand with the thumb of the right. He is talkative and does not always confine his talk within the bounds of sober sense or truth. This drug is cheap, and only people of the lowest classes indulge in it. All these causes combine to make ganja and the "ganjeri" alike disreputable. Moreover, the Hindu mind, from its past climatic and religious history, is averse to all sorts of intoxicants, and it is a pity that this frame of mind is changing with the spread of western civilization.

I have never heard of any custom of worshipping ganja or bhang.

34. I do not believe that it would. Of course the want of the customary excitement will be felt as a trouble for a few days, but my experience of such men sentenced to imprisonment leads me to think that they can very well do without it. It is another matter whether poor men, whose work compels them to frequently expose themselves to wind and rain or to undergo great fatigue, ought to be deprived of the means of alleviating their hard lot by a cheap smoke which deadens the sensations of cold and pain to a considerable extent.

35. A stringent law against the growing of the plant and its use strictly enforced would minimise, if not eradicate, the practice. The same result in a less measure would be secured by raising the price of the drug. Illicit growing of the plant is bound to increase on the adoption of either of these courses, but it will diminish as the present race of smokers die out or are weaned out of the habit by want of the drug or actual suffering of or the dread of punishment.

Of course the ganja smokers will be highly incensed by prohibition of their favourite drug, and the bhang drinkers will feel the same sentiment with somewhat less intensity, but there cannot be the least political danger from such discontent. The better class of bhang drinkers and ganja smokers will not dare openly express their sentiments for fear of public opinion, and as for the lower classes they will meet the order with resignation. As it is, alcohol is already ousting these drugs, their prohibition will most likely give a further stimulus to the sale of the former. The poorest classes may take to toddy.

37. Charas seldom if ever produces that perfect inebriation and stupor that ganja smoking does in the novice. The difference in the effect is, I should think, one in degree not in kind.

38. I do not know.

39. From a personal experience of a number of ganja smokers and bhang drinkers, I am inclined to think that the latter practice is by far the least injurious to health. The ganja smoker is as a rule thin and prone to anger. I have invariably found corns of a peculiar form in the soles of the

feet of ganja smokers. They are said to be liable to dysentery and lung diseases. I have never noticed any such thing in the bhang drinker.

40. Native physicians use bhang largely in the preparation of "módaks"—emulsions for the cure of indigestion and of debility. I have seen ganja used for the cure of rinderpest and other cattle diseases.

41. I do not believe in beneficial effect derived from the moderate use of ganja, bhang and charas, except that they perhaps temporarily alleviate the sufferings of people exposed to wet, cold and fatigue.

(a) As food I do not believe them to be of any the slightest use. There can be no doubt that under their influence men eat a much larger quantity of food than ordinarily, but whether they digest it all is more than I can say.

(b) Yes, temporarily at least.

(c) and (d) I do not know.

Fishermen, boatmen, and men who are obliged to work in water use ganja "to keep out the water" as they call it; musicians to keep up nights and to keep the voice clear; postal runners to alleviate the effects of the fatigue and exposure of their avocation. Wrestlers drink bhang partly to allay the fatigue of their practice and partly to be able to eat and digest well.

My answer to the above questions refer only to moderate use of the drugs.

42. I believe occasional and moderate use of bhang to be harmless. Ganja I believe to be injurious to health even when used in moderation. I have seldom come across a smoker who looked reasonably healthy or good tempered. I have not seen many charas smokers and have nothing to say about them.

43. Yes; ordinarily so; but if they are roused to anger or if they entertain a lasting grudge, their partial want of control over themselves when under the influence of the drug makes them worse enemies than ordinary people. Ganja I believe exerts a direct influence in spoiling a man's temper.

44. He feels a pleasurable sensation all over the entire nervous system. The mouth relaxes, the eyes look merry, and the man feels at peace with every thing and every body. The appetite revives and the man feels fresh again. The effect in the case of the smoke is almost instantaneous, and in the case of the drink much quicker than that of alcohol. I do not think that in either case it allays hunger; it makes one more capable of bearing it perhaps.

The continuance of the effect depends on the quantity of the drug smoked or drunk, and on the physique of the man who uses it. In the case of the ordinary smoker the partial intoxication lasts from 2 to 3 hours I think; it goes on losing in intensity from the very first. In the case of bhang it lasts perhaps a little longer, say 4 to 5 hours. I do not think that there are any unpleasant after-effects in the case of moderate habitual use of either of the drugs except the silent and almost imperceptible loss of health that it causes.

The want of ganja certainly creates a longing in the mind of the habitual smoker. He feels loss of appetite and a disinclination for all sorts of work or exercise and a sort of general misanthropy. But this is a temporary state and wears off in less than a month.

45. As I have said above, I believe that the habitual smoking of ganja, even in moderation leads to physical, mental and moral deterioration. Its effect becomes first visible in the attenuation and enfeeblement of the body and quickness of temper and eccentricity in words and action. Later on these evil results stand in the way of a man's finding employment, and a gradual disinclination for regular active work succeeds; necessity helped by misanthropy and a gradually diminishing sense of right and wrong soon makes the man dishonest. This is perhaps an extreme case, but the general tendency is in this direction. A ganja smoker is the least reliable of working men.

Ganja attenuates the body and is popularly believed to be productive of dysentery and lung complaints, and corns in the soles of the feet often impeding quick movements.

I have seen more than one case of dysentery amongst ganja smokers, but I am not prepared to say that the disease was the result of the habit. I cannot remember any cases of lung complaint brought on by ganja smoking. I have never heard of a ganja smoker suffering from loss of appetite; on the other hand, I believe that such people eat proportionately more food.

I believe that the habit of ganja smoking does unfit a man for regular work and gradually impair the intellect and eventually deaden the power of judging between right and wrong and makes him regardless of consequences. But I do not think that it induces debauchery, except it be through idleness.

I have seen three cases of young men who became insane through excessive ganja smoking; two were Brahmin lads whom I knew from infancy. There was no hereditary taint at least in one of them. Both the men were fine, well-grown, healthy people, with decent education in their vernacular, and with some knowledge of English. They were between 16 and 20 when they took to ganja smoking. Both the men were in Government service, and both of them smoked excessively; both became insane within 5 years; one died of dementia, not speaking a word or taking the least heed of his surroundings for 18 months that he survived the first attack of the disease; the other still enjoys a small pension that a kind District Superintendent of Police procured for him, and goes about catching imaginary thieves and fighting fancied daemons—the wreck of as fine a young man as I have seen anywhere in the Bengal Police. The third case was that of a Bania young man who was at school in his boyhood, but who took to his ancestral occupation while yet young. He fell into evil company and became a ganja smoker at the age of 18 or 19; he went raving mad for about a year, was put into a lunatic asylum by his people, and is now a thriving stall keeper in the New Market, Calcutta, never caring to touch a chillum again.

I shall state another case which occurred some 18 years ago. J.—was a clerk in the Registrar's Office, High Court, Calcutta, for over 25 years. He was a man of a retiring disposition, spoke little, minded his business, and was believed to be respectable by all his acquaintances. He used, however, to beat his children unmercifully, and people who knew him well said that he smoked ganja in secret. In 1876, I think, about the time that he was to retire, information was received by his family that he had suddenly become insane. He was brought home raving mad, talking incoherently, singing, shouting, sometimes striking people or repeating the forms of decrees

and judgments that he used to copy. His people found it necessary to put restraint on his movements. He received a small pension and lived till some time in 1891. With increasing age he ceased to be violent, but he never recovered his reason completely. I do not know if he continued to smoke ganja after he became mad. He however had a banking for it and never missed an opportunity to indulge in it.

I could give a few more cases; but I think the above are sufficient. I believe that in the acute stage of the disease there is hope of cure by complete abstinence and freedom from excitement of any sort. I have seen both amentia and dementia resulting from the use of ganja; the former more frequently than the latter. In the cases that came under my observation there was no mental anxiety or brain disease, as far as I know, to account for the habit. I do believe, however, that men of weak understanding, and especially those whose will power is weak when they once get into the habit soon become excessive smokers and gradually drift towards insanity after a time—the original weakness of the head helping to bring about the result.

46. I believe that habitual excessive use produces the above effects sooner than moderate use.

47. The children of the ganja smoker or the bhang drinker have greater chances of following the paternal habit than other children. I do not, however, believe that this is due so much to any inherited tendency as to the fact of that want of salutary aversion to such indulgences which surrounding public opinion inculcates and the opportunities they get of indulging in it, at a period of life when curiosity is stronger than consideration of consequences.

48. I knew a man of good family and in easy circumstances who indulged in all sorts of intoxicants, wines, spirits, opium and ganja in excessive quantities. He had two sons, both of them born during the period of the father's excessive indulgence; the children in their infancy and boyhood did not differ in any marked way from other children. They were at school and prosecuted their studies up to the middle school standard, but by the time they came to the period of adolescence they took to the paternal habits one after the other, and both of them died before they were 20.

49 and 50. I do not know.

51. Not that I know of. The indulgence in these drugs makes a man eccentric and quick-tempered and unreliable in his engagements; moreover, the bad opinion that people entertain of such persons stands in the way of their getting work. Gradually necessity compels them to be dishonest. But where the question of bread does not complicate matters, the ganja smoker has as good a chance of being honest as any other man. The ganja smoker, however, is as a rule a short-tempered man and is apt to be violent on provocation that would not rouse an ordinary man to acts of violence. "As short-tempered as a ganja smoker" is a proverb in Bengal. From my experience of ganja smokers I am of opinion that they are prone to acts of violence; that the poorer portion of them are apt to become dishonest on account of their lazy and thriftless habits and the difficulty they find in obtaining employment. But the habit *per se*, I do not think, is productive of offences against property.

52. Excessive use only intensifies the above effects.

53. Yes; I have known more than one case of homicide that had its origin in this habit. I quote one out of several that come to my mind now. It occurred more than 20 years ago. There was a celebrated shrine of Kali on the left bank of the Bhagirathi in my native district. The place was at some distance from the neighbouring village, and the shrine was surrounded on all sides by a number of ancient banyan trees which added to the weird appearance of the blood-stained shrine. There was a Kapalik who usually officiated at the sacrifice of scores of goats that used to be brought there on Tuesdays and Saturdays, as promised offerings for cures from fever and other diseases. A sanyasi of the Shakt persuasion came and settled there with two Bhairabis and soon secured a widespread reputation for sanctity and influence with the goddess, to which his stalwart frame and bushy hair and beard and red eyes and taciturn manners contributed not a little. He used to honour the neighbouring gentry with occasional visits extending over days and weeks at a time, during which occasions high honours were paid to him and the supply of ganja was unlimited. He was a man of some education, and quoted verses from the Gita during his lucid intervals. One day he took umbrage at some supposed act of neglect of the Kapalik, and in the evening went to the temple "to see the goddess" after his usual smoke. He found the Kapalik prostrating before the goddess and the blood-stained "khanda" with which he was killing the goats lay temptingly standing against the wall. In an instant the sanyasi snatched it from its place and cut the Kapalik into two at a single blow. With the assistance of the Bhairabis he removed the body and threw it into the river below. But the matter got wind and a neighbouring Deputy Magistrate came to enquire into the case; the women gave out the story, and the sanyasi seeing further attempt at concealment to be useless, made a full confession and was duly hanged.

54. Professional lathials (clubmen) I have seen to smoke ganja before going out for a fight, and I have heard that dacoits often do so before proceeding to their work of spoliation. It is not difficult to see that a man bent on a crime, but still deterred by the fear of punishment and the opinion of his fellows, would drown the deterrent motives by having recourse to a smoke that would make him forget everything save the strongest present motive.

55. As far as I know, criminals mix dhatura or other drugs with ganja or bhang for the purpose of stupefying their victims. I have seen more than one case of complete stupefaction brought on a novice by an overdose of ganja or bhang.

56. Admixture of dhatura with ganja or soot with bhang makes them much more active, and it then becomes a question of quantity of the intoxicant and strength of the man as to what effect it will produce. I have seen many excessive smokers, mostly Sanyasis and Bairagis, mix dhatura with their ganja. I knew a young man of a respectable Ebrahim family do it for a time. He became insane and remained so for a year and never attempted it again. I have heard that some ganja smokers about Halishahar mix their ganja with opium, which they mix well in the palm of the left hand by pressing them with the thumb of the right, and then smoke the composition in a chillum. It is said to be highly intoxicating, and goes by the name of "bullet shot" amongst the smokers.

57. I have never seen such a case.

69. I have never known the wishes of the people to be consulted by Government officers before establishing a ganja shop in any locality. To my mind there can be no doubt that the wishes of the community ought to be consulted and respected on such occasions.

Oral evidence.

Question 1.—It was in a few bad cases that I paid wages to workmen's wives. I did it because I found that ganja smokers wasted their money. I can recall the names of the men in a couple of cases. In the silk factory I seldom had more than 250 hands. In the indigo factories the number ran up to 1,000 at times. It is so long ago that it is only the general impression which remains in my mind. Ganja smokers were not all wasteful, but there were cases in which I was confident that wasteful living was caused by use of ganja. Most of the hands belonged to the lowest classes. I knew most of the men and acted on my own knowledge of the workpeople. The husbands sometimes ill-treated their wives in consequence of my paying the wages to the women. Liquor is permitted to be consumed by all the lower class people in Bengal, and most of them drink if they can get it. I am not prepared to say whether the workmen indulged in liquor to excess or not. Sometimes the spendthrifts I have referred to had other vices which caused them to waste their money. I was within 20 years of age at the time I am talking of, and it is 20 years ago. I am not justified in saying as a fact that the wasteful habits of these people were due to the ganja habit. I had not sufficient knowledge of all their habits.

Question 15.—I refer in this answer to the smoking of the bhang leaves. The boiling of the bhang may have been preparatory to other uses than smoking.

Question 16.—The drug I refer to in the first part of this answer is bhang. The latter part of my answer is suggested by a plant grown in my father's garden which was blown down or fell by some other accident, and which the gardeners appropriated for smoking. The plant was, I think, sown from seed contained in some ganja.

Question 20.—A tobacco smoker—and nearly all men of the lower classes in Bengal are such—would not hesitate to accept a pull at a chillum containing ganja which was being smoked by his companions.

Question 24.—The preparations called modaks are soft solids.

Question 27.—The very poor classes rarely have anything to do with bhang. If they get it, they would smoke it, or pound it up into a bolus. It would be a sort of makeshift for ganja.

Question 29.—I have seen "aghoris" putting dhatura seeds into the chillum.

Question 32.—I have actually seen two young men, one of whom is now filling a good position and the other is dead, take heavy doses of bhang at the Dasera, and in spite of all our efforts to rouse them, they did not recover full consciousness till midday the next day. The drug was prepared by an old cook, a ganja smoker, and was supposed to be bhang prepared with the usual admixtures. I do not remember that any others of the company were overcome in the same way as the boys. I was about 17 years of age and drank of the mixture. Some intoxication came over me, but I was quite well the next morning. The intoxication

came on in five minutes. The feeling was that the bed with me on it was being raised and lowered. The boys must have drunk more than I did.

Question 35.—When I was young it was the fashion for a good many among the well-to-do classes to indulge in some intoxicant or other. Most took opium in pills. Some took ganja on the sly. Few now take either of these drugs in consequence of the fashion having leaned to alcohol. I have said that the lower classes would follow this fashion. I consider the hemp habit, as we see it, to be preferable to a change for alcohol to be consumed to the extent it is among the lower classes in Europe. The sale of alcohol would increase if the consumption of hemp were stopped.

Question 39.—The feet of ganja-smokers in Bengal frequently bear corns on the soles. In such cases they walk tenderly.

Question 45.—The ganja smoker is unreliable and bad tempered. He cannot be trusted to obey orders or keep his engagements. In reference to my remark regarding hereditary taint in one of the three cases, I would say that in the second case there was information that the father of the boy who became insane was at one time himself insane. Both the Brahmin lads took alcohol. I don't think the Bania did or the man in the fourth case. I cannot speak about the habits of these boys with reference to profligacy. I cannot be certain that the boys smoked pure ganja. They did not smoke in my presence, and would not be likely to tell me what they smoked. The one who died of dementia was never violent. He tried to commit suicide. I knew him well, but he would not look at or recognize me. I am not aware that during 18 months he ever recovered his senses. I was told of no such temporary recovery. I saw him some months after he had been brought home in the state of dementia. I am sure of the hallucinations I described in the other case. I have met this man lately; and could not find out if he still smoked ganja. The Bania went to the Murshidabad or Dullunda Asylum. I met him in Calcutta in 1890 or 1891, and he is doing very well. His name is Romesh or Romsha, and he keeps a stall selling vegetables. I cannot say if any of these cases was preceded by mental trouble. One of them was idle and fell into the company of ganja smokers. He was not criminal or vicious. I am usually certain that the Bania had nothing serious on his mind. The fourth case did not go into the asylum. There was no history of epilepsy in the family of either of the four cases. I have known some two or three dozen of cases of people who went insane from various causes. I remember the case of one young man in Raipur who went insane from ganja. I don't think this young man was given to drinking. I use the terms "amentia" and "dementia" as I find them in books of Medical Jurisprudence and similar works. If "amentia" means congenital idiocy, it should be changed to "mania" in my answers.

Question 48.—The two young men described in my answer cannot be held to be instances in point, because the father had other bad habits, and the youths themselves indulged in ganja.

Question 53.—There can be no doubt the San-yasi was a ganja smoker who used to consume the drug to excess, but I cannot say from my personal knowledge that he had been indulging on that day, although I am morally certain he must have been. I have no recollection of a crime committed by a ganja smoker in which the perpetrator was unaware of what he had done. It appears to me

that the ganja smoker acts on impulse and is deficient in self-control.

Question 56.—I have heard of soot being admixed with bhang. This soot is the dust and smoke collected on a cobweb or other thread or rubbish in a cook-room which had not been cleaned for a long while. The young man who took dhatura with his ganja was a married man. I don't know why he took dhatura. He died of snake bite. I

believe the man contracted the habit when he went to Murshidabad to study music. He was reported to have taken ganja in moderation after his recovery.

Question 69.—I know of no case in which people have objected to the establishment of a shop and their representations have been ignored. Nobody likes having a ganja shop next his house. I have not seen ganja consumed on the premises. I am not aware that the practice is prohibited.

71. Evidence of BABU KALIDAS CHOWDHRY, Brahmin, Pleader, Hoshangabad.

1. In the course of my practice as a Pleader, which extends over a period of 16 years in this district, I have had opportunities of coming across several men in the habit of using hemp drugs or dealing in them with licenses from Government. My experience is not, however, based upon any critical examination of ganja smokers or bhang drinkers who never became objects of my study. In answering these questions I have made use of what personal knowledge I possess, and have made enquiries from those who either use or deal in these drugs.

2. The definitions of Dr. Prain, so far as I have been able to ascertain, are correct. Ganja, bhang, and charas are the common names of these drugs. Ganja is also called *sulpa*, *shankar-ki-buti*.

3. I do not know of any district in these provinces. It is cultivated in the Nimar district.

7. There is cultivation of the hemp plant in the Nimar district only, but for the production of ganja only.

The extent is given by the official reports as under—

1888-89	.	.	.	940 acres.
1889-90	.	.	.	993 "
1890-91	.	.	.	520 "
1891-92	.	.	.	653 "
1892-93	.	.	.	940 "

8. The excess rainfall of 1891-92, which prevented the cultivation operations to a considerable extent, and the high prices which the small out-turn fetched, encouraged the cultivators to sow more ganja in 1892-93.

9. Ganja is cultivated by throwing seeds on the prepared ground, like jowar in the month of June or July, when the rains fairly begin. After the seeds are thus thrown, the ground is ploughed up again in order that the seeds may get themselves mixed up with the earth. After a few days the plants grow about a foot high, and then other plants which are likely to obstruct their growth are weeded out. If the hemp plants grow too near each other, they are taken out and sown again at some distance from each other. The unhealthy plants are also uprooted and destroyed.

10. They are of the same classes as other agricultural cultivators. As a rule, however, those only cultivate who have had the cultivation of ganja in their family for years.

11. No.

12. I have no information on this point.

13. Before 1889-90 cultivation of ganja was permitted only in Nimar and in the Katol tahsil of the Nagpur district. Since 1889-90, the cultivation of ganja in Katol has been stopped. It is allowed in the Nimar district alone, because, I believe, its soil is favourable to its growth. It

requires moderate rainfall and high ground, which are the characteristics of the Nimar district, the staple produce of which is jowar. I do not think it is impossible to grow ganja in any other part of this province.

14. Only ganja is prepared into a sweetmeat called majum.

15. I have no accurate information on this point.

16. Yes; it cannot be prepared from the hemp plant wherever grown, *e.g.*, it is not prepared from the hemp plant grown in the Nimar district. I cannot answer the other part of the question as the wild plant does not grow in our province.

18. All these drugs deteriorate by long keeping. Ganja does not lose its strength for 8 or 10 months. Bhang does not lose its strength for 8 or 10 months. Charas for several years. But ganja and bhang become altogether useless after two years' keeping, and charas after 10 or 12 years' keeping, or perhaps more. The rainy season spoils the ganja and bhang; after the second rainy season they become altogether spoilt. I know of no special measures which can be taken to prevent deterioration.

19. Ganja is used for smoking as well as for other purposes. It is administered as medicine to horses, bullocks, etc., to make them strong. It is supposed to be a good medicine for piles, and is administered by fumigation. An oil is extracted from its seeds, which is rubbed on parts affected by rheumatism. It is presented to the rural gods generally, but particularly to the god Siva or Mahadeva, who is the patron saint of this drug and of bhang. On the Sivaratri night, which is reserved for the worship of Mahadeva alone, this drug is invariably presented to the image of the god everywhere. Ganja is also swallowed in pills by admixture with cloves, cardamom, kasni, etc., but this is rare. Charas is smoked only.

20. Ganja is used by all classes of men, but principally by the fakirs, sanyasis, and the lower classes who depend on physical labour for their livelihood everywhere. I have no experience about charas. It is not smoked at all here.

21. The flat ganja, or chapta ganja, is generally smoked here and preferred. The round ganja, or gol ganja, is said to be much liked in Northern India and Bengal. The latter kind is more intoxicating than the former which is in use here.

22. I have no information about charas which is not in use here.

23. Never used for smoking, so far as I know.

24. I do not know if bhang is eaten. The Marwaris drink bhang largely. On occasions of the Holi, Dewali, and the Dasera festivals amongst the Hindus, it is used for drinking all over India,

especially in Holi and Dewali in Northern India, and in Dasera in Bengal on the Dashami day. I cannot give the proportion, but now it is decreasing with the increase of education and civilisation.

25. So far as these provinces are concerned, I do not think that the use of any of these drugs is on the increase, in spite of the Government record that the consumption of ganja is on the increase. The following causes work against the increase—(1) the higher price than before; (2) the increase of education and civilisation; (3) the restriction placed by Government on the cultivation of hemp plants.

The Government record shows the consumption of ganja as follows:—

1889-90	.	.	.	970 maunds.
1890-91	.	.	.	1,019 "
1891-92	.	.	.	1,156 "
1892-93	.	.	.	1,194 "

This does not necessarily denote that the actual consumption in the province is on the increase every year. It rather shows that there has been closer watch every year on the smuggling of these drugs from the foreign territories. The normal point has not been arrived at yet probably, and unless we have some more years' experience, we cannot say for certain whether the consumption is increasing or decreasing. I cannot disbelieve my senses. I do not see that these classes of men are increasing.

26. There are more of class (a) than of (b), and more of (c) than (d).

27. These are taken principally from the lower classes, and the mendicants (fakirs and sanyasis) who use principally ganja. The former resort to the use of ganja because they can go through the physical labour, on which they depend for their livelihood, with more cheerfulness, and the latter are said to be able to perform their devotions with greater concentration of mind. Bhang is used principally in the hot season to allay thirst and increase appetite.

28. One pice for (a)	} Ganja.
One anna for (b)	
One pice for (a)	
Half anna for (b)	} Bhang.
This is for our province.	

29. Ordinarily with bhang—black pepper, kasni, khas khas, anise, sugar, kakri seeds.

Occasionally with bhang—milk, kesar, rose flower.
Exceptionally

Ordinarily with ganja—tobacco leaves.

Exceptionally—ilachi seeds and atter.

"Bhang massala" is sold in the banias' shops for admixture with bhang, and consists of those ingredients which are ordinarily mixed with bhang, as stated above. Dhatura is mixed to cause stupefaction, but it is neither ordinarily nor exceptionally used for the purpose of intoxication. The object of the other admixtures is to make the drink cooling when it is bhang, and less stupefying when it is ganja. Pachnag (aconite) and kuchla (nux vomica) are also mixed with ganja either to increase weight or to intensify intoxication.

30. Ganja and bhang are more frequently used in company than in solitude. It is mainly confined to the male sex above the age of 15 years in the case of ganja, and above the age of 5 in the

case of bhang. It is not usual for children either to smoke ganja or to drink bhang.

31. The habit of smoking ganja is easily formed and difficult to break off, but it is otherwise the case with bhang. I am informed that in the case of any of these drugs there is no tendency for the moderate habit to develop into the excessive.

32. It is customary to present ganja to the gods amongst the Hindus, also to drink bhang in Holi, Dewali and Dasera festivals. The use of these drugs on such occasions is regarded essential. It is generally temperate, and is not likely to lead to the formation of the habit.

33. The consumption of ganja and bhang is regarded with much more toleration than wine drinking. In fact, religiously and socially speaking, I think there is no popular prejudice against either of these drugs. Excessive use is certainly condemned, but beyond this there is nothing else. The use of ganja is generally in disrepute for the evil effects it has on the physical constitution. I hear that the hemp plant is worshipped in the Berars.

34. It would certainly be a serious privation to the labourer class at least to forego the consumption of ganja, and to a certain extent to the sanyasis and fakirs. Ganja is the cheapest intoxication available. One pice worth of ganja keeps up the spirits of the labourer who can under its influence work the whole day without feeling himself tired. I do not think that the bhang drinkers will feel it a privation if they were prohibited its use. I cannot give any idea of the number of people who will suffer the privation, but I can safely say that the poor people will think a boon taken away from them.

35. It would not be feasible to prohibit the use of the ganja or bhang. It would be used illicitly, and the prohibition would produce a serious discontent among the consumers not amounting to a political danger. I do not think that the prohibition will be followed by the use of alcoholic stimulants because of a religious and social prejudice against them, and also because of their high price. But they may have recourse to other equally cheap drugs, if any.

36. No reason whatever (in this province) to think that ganja smokers are resorting to alcohol. Alcohol is much more costly. There is prejudice, social and religious, against alcohol. But the high prices of alcohol may be driving the consumers of alcohol to resort to ganja. This is only a fear which may be imaginary, for the statistics are not accurate, as they cannot be possibly so.

37. I know nothing about charas smoking.

38. Only flat ganja is in use here, and I cannot give the different effects.

39. Drinking bhang is less injurious than smoking ganja. The one is an occasional drink, which does not form into a habit even if drunk daily, but the latter becomes a habit and makes the smoker uneasy and ill if he is deprived of it for a time.

40. The baidis and hakims prescribe ganja as a medicine. It is also used as medicine for the cattle.

41. A moderate use of ganja or bhang is beneficial in its effects for purposes (a), (b), (c). Generally the poorer classes use the drugs for the above purposes. I refer to both.

43. Yes.

44. The immediate effect is to produce exhilaration rather than intoxication. It is refreshing. I cannot call it intoxication, for it does not cause stupefaction to any perceptible degree. There are

no after effects. Want of subsequent gratification produces uneasiness (and illness in some cases) in the case of ganja, and nothing in the case of bhang.

45. The effect of the habitual moderate use of ganja is that it weakens the body and the mind, and not necessarily the moral sense. After a long use it weakens the digesting power. It can cause bronchitis and asthma, but bhang is not so injurious. Both these drugs bring a laziness after a length of time. Ganja may cause insanity of a temporary kind.

46. I can only guess that the effects will be proportionately aggravated. The excessive use of ganja (habitually) brings on insanity of a permanent kind.

47. No.

48. I have no information on this point.

49. Yes, and so used by prostitutes also. The use for this purpose is more injurious, as it produces impotence. I am referring to ganja only.

50. The same answer as above. The effects are aggravated.

51 and 52. I do not know. There is no connection, so far as I know, or have been informed.

53 and 54. No.

55. Yes, by admixture with dhatura—both ganja and bhang. No complete stupefaction can be induced without admixture with dhatura.

56. Ganja and bhang are changed in their effects when mixed with dhatura, whether used in moderation or in excess. Dhatura, I am informed, is always mixed with the drugs to cause stupefaction in others, and not when the drugs are used for one's personal consumption.

57. Ganja is sometimes prepared into a sweet-meat called majum, and is eaten, but never drunk. Nor is charas ever eaten or drunk, so far as I am aware.

58. The Excise Administration in respect of the hemp drugs is, I think, working very satisfactorily, but I wish to suggest an alteration in the Excise Act.

59. The Excise Act prescribes the minimum

quantity of ganja and bhang which one can legally possess as follows:—Ganja, 5 tolas; bhang quarter of a seer.

This is enough for a moderate consumer to last for five days in the case of ganja and a fortnight in the case of bhang. This provision affords great facilities for smuggling the drugs from the foreign territories which lie conterminous with many of the districts of the Central Provinces. This is a reason why the normal consumption of the drugs is not known in the province. I think the minimum should be reduced to only two day's consumption, so that the smugglers will not think it worth while to bring them from foreign territories.

60. I think there is sufficient control in this respect.

61. Charas is not cultivated in this province.

62. Bhang is not produced from the ganja, which is cultivated in the Nimar district, and I cannot answer this question.

63. There is no objection to the system of wholesale vend, but the retail vend can be reduced in view of my answer to question No. 58.

64. No.

65. I think in our province these drugs are sufficiently highly taxed, and are reasonably placed beyond easy access.

66. I think the rates of taxation should vary directly with the intoxicating power of each of these kinds of ganja.

67. I do not think there is much objection. The consumers must pay for the luxury or the necessity according as they look upon these drugs.

68. There are no such shops in our province.

69. No. I do not think it is necessary, for the consumers are few, and very few persons care whether the shops are opened or not in any locality.

70. I think there is much room for improvement in this direction. If the taxation and control be not uniform in the British and Foreign India, the smuggling should be closely watched. But as this is not possible, I think the minimum quantity which each person can legally possess should be reduced to two days' consumption only.

72. Evidence of RAO SAHIB RANGRAO HARRY KHISTY, Pleader, Bhandara.

1. I have been for the past 23 years practising as a pleader in the district, and my information is derived by personal contact with the people in my practice, or from enquiries made by me from the people.

2. The definitions may be accepted for Central Provinces. Charas is never imported in this district. Flat ganja and chur or broken ganja is imported for sale. Ganja imported from Khandwa is called "deshi ganja," and ganja imported from Indore, Marwar or Hardwar is called "perdaishi ganja."

3. As ganja is not produced in this district, I cannot give any information under this Chapter.

14. As ganja, charas or bhang is not manufactured in this district, no information can be given regarding its manufacture or preparation.

19. [Chapter V—Note. As only flat ganja and chur or broken ganja is imported in the district, my answers will be confined to its consumption and use only.]

Flat ganja is used only for smoking; broken

ganja or chur is used, besides smoking, for eating and drinking. For eating it is made into a pill mixed with jaggri and swallowed or eaten. For drinking, as a substitute for bhang, it is fried a little in a pan, washed and pounded with a little water, and made into a separate ball. A separate compound is made of the following ingredients:—(1) Dried roses, (2) poppy seed, (3) black pepper, (4) almonds, (5) cinnamon, (6) veldoda, (7) kasni or chicora, (8) seeds of kakdi.

These are then mixed with the ganja and poured from one pot into another, for being mixed properly, and then strained through a thin cloth, and this is drunk by adding a little sugar and milk. This preparation is called "thandai" or cooling drink.

The above preparation is also made into sweet-meat when it is called majum.

I learn that the Kushteas or weaver class people, during marriage festivals, mix ganja with their meat in curry. The Gossains, Bairagis, and purdaisis generally eat and drink ganja with

more or less of the condiments above described. Brahmins and Marwaris occasionally use it.

20. (1) Gossains, Bairagis, and fakirs, generally (with very few exceptions), 95 per cent.

(2) Gonds and Gowaries, 50 per cent.

(3) Powars and Lodhis, 75 per cent.

(4) Brahmins, Musalmans, Marwaris, Koshtees and Mahars, 25 per cent.

The largest consumption is in Tarora tahsil adjoining the Balaghat district.

Flat ganja is preferred for smoking to that of chur or broken ganja.

Round ganja is never imported in this district.

22. Charas is not imported nor used in this district.

23. Bhang is not used for smoking, as it is not sold. The leaves imported with the ganja are generally destroyed. Broken ganja or chur is used as a substitute for "bhang" for eating and drinking.

24. See my answer to No. 19.

25. I am of opinion that ganja smoking is on the increase. Looking at the gradual increase of income from ganja, both under the farming and the sale system, no one can shut his eyes to the fact that the consumption of ganja has greatly increased.

Ganja income under farming system.		Ganja income under sale system.	
Year.	Rs.	Year.	Rs.
1871-72	1,575	1879-80	5,006
1872-73	1,731	1880-81	5,171
1873-74	1,792	1881-82	4,875
1874-75	2,500	1882-83	5,880
1875-76	2,025	1883-84	7,312
1876-77	2,005	1884-85	9,381
1877-78	2,415	1885-86	12,371
1878-79	4,453	1886-87	11,110
.....		1887-88	11,299
.....		1888-89	8,744
.....		1889-90	11,430
.....		1890-91	11,600
.....		1891-92	12,399
.....		1892-93	14,199

It appears that the stimulus to ganja smoking was given from 1878-79, when the Bengal-Nagpur Railway was under construction, on account of the influx of labourers and contractors from the North-Western Provinces who brought this pernicious habit with them and taught the people both by precept and example. The reasons of its consumption being now on the increase are—(1) it is a cheap substitute for liquor or opium; (2) the moderate smoking of "ganja" is not considered by the people as disgraceful; (3) it is smoked like tobacco and with tobacco.

26. My estimate of the proportion of ganja smokers is as follows:—

(a) 50 per cent.

(b) 45 per cent.

(c) 10 per cent.

(d) 5 per cent.

27. (a) Gossains, Bairagis use this as it is considered the gift of Mahadeo, and it is supposed to be enjoined by him for concentrating the mind of his worshippers.

(b) Gonds, Gowaries, Telees, Mahars and other labouring classes, as cheap intoxicating smoke, as a staying power for severe exertion or exposure, or to alleviate fatigue.

(c) Powars and Lodhis partly for the above reason and partly because it is not considered disgraceful as opium or liquor.

(d) Brahmins, Marwaris, Musalmans, Koshtees, for pleasure.

28.(a) 3 pies to one anna.

(b) One anna to two annas.

29. See my answer to Question No. 19 for mixtures. Dhatura is very rarely used by Gossains to get more intoxication. "Bhang massala" is not sold in the bazar.

30. The private smokers of ganja are about 25 per cent. It is more consumed in company. Females do not smoke ganja. Children do not smoke ganja. They follow the example of their parents or others afterwards, when they attain age of discretion. Generally this habit is formed when a person can earn for himself, and kept up until old age.

31. The habit of smoking ganja is easily formed by company and association. In moderate smokers it is easily broken off. It has a tendency to increase and become excessive.

32. I know of no religious or social custom in which the use of ganja is considered essential.

33. Moderate smokers of ganja are not regarded generally with disfavour, but excessive smokers are called "ganjairis," but are not outcasted on account of it. There is no public opinion (social or religious) in regard to the practice. There is no custom of worshipping the hemp plant on certain occasions by certain sects of the people, as far as I am aware of.

34. I think it would be a serious privation to habitual smokers. Gossains, Bairagis and perdaisis will bitterly feel it. Gonds, Gowaries, Powars, Halbas and other labouring classes will feel that they have been deprived of the fatigue-relieving drug; the Brahmins, Musalmans and Marwaris will consider themselves deprived of their occasional luxury.

35. I think it would not be feasible to prohibit the use of ganja, just as it would not be feasible to prohibit the use of beer in England. I think the prohibition would lead to illicit consumption, for these plants grow wild in some parts of India, and it would be very easy to grow these plants in fields, gardens, and private houses without fear of detection. It would cause a good deal of discontent amongst the consumers, but I do not think that, as far as Bhandara district is considered, such discontent would amount to political danger. I certainly think that the prohibition would be followed by recourse to alcoholic stimulants and opium.

36. I do not think that alcohol is substituted to any extent by ganja. The largest consumption of ganja is amongst those people who do not drink or consider it disgraceful to drink.

37. As charas is not imported in the district, the difference cannot be mentioned.

38. Flat ganja and chur is imported into the district. The former is generally used for smoking, and the latter for eating or drinking.

39. Smoking of ganja is more injurious than eating or drinking, as the smoking affects the lungs.

40. Native doctors prescribe ganja for dysentery. Sometimes it is used in cattle diseases.

41. Moderate use of ganja is beneficial in its effect—

(a) as a food accessory or digestive;

(b) to give staying power under severe exertion or exposure, or to alleviate fatigue;

(c) as a febrifuge or preventive of disease in malarious or unhealthy tracts;

(d) I know of no other way.

The Gonds, Gowaries, Powars, Halbas and other labouring classes. I refer to both moderate occasional use and moderate habitual use. In Bhandara and Balaghat districts, the labouring classes in the malarious and unhealthy parts use ganja smoking for the above use.

42. I consider the moderate use of the drug as beneficial as well as harmless, as far as ganja is concerned.

43. Moderate consumers are generally inoffensive to their neighbours, as far as ganja is concerned.

44. The immediate effect of ganja smoking, moderately, on habitual smokers is to create a kind of forgetfulness and an aptitude for work. It is refreshing after severe fatigue. It produces intoxication when inhaled. It does not allay hunger but creates appetite. The effects last about two hours. The after-effects are naturally languor and weakness. In habitual smokers the want of subsequent gratification produces longing or uneasiness. Habitual moderate smokers generally use it after meals, and the want of it generally causes indigestion or bloating of the stomach.

45. The habitual moderate use of ganja smoking does not produce any noxious effect, except the affecting of the lungs, which causes either bronchitis or asthma, which generally comes on in old age. It does impair moral sense or induce laziness, or immorality or debauchery, when used for the purpose. It has the effect of deadening the intellect, but I have not seen a case of moderate smokers becoming insane. In excessive smokers it certainly leads to insanity of a temporary character, and the symptoms do come on by the use of the drug. I know of only one case, *Empress vs. Amdoo*, No. 12—1892, dated 9th May 1892, for attempting two murders, under section 307. In this case although temporary insanity was pleaded, yet from the admission of the father of the accused, I learnt that the fits of insanity used to come on on the use of ganja smoking. His father told me that these fits were induced by excessive ganja smoking. The accused was under observation of the Civil Surgeon, but no such fits were observed just because he was not allowed to smoke ganja in jail. The accused in this case ordered one of his servants to tie his bullocks and the servant not having obeyed him immediately, he committed a most murderous assault by a hatchet, giving him four blows; and then he ordered another servant to catch him and immediately assaulted him also, and it was with difficulty that the hatchet was taken away from his hand, and afterwards he absconded. In defence a number of these fits of insanity were put forward, which I believe were all caused by ganja smoking to the excess.

46. I am of opinion that the excessive use of ganja does impair the constitution, injures the digestion, and causes loss of appetite, causes bronchitis and asthma, and impairs the moral sense and intellect, and causes insanity of a temporary nature.

I know of another case of Nilkant Bhicajee Joshi who served as Station Master at Khandwa and other stations of the Great Indian Peninsula Railway. He became addicted to ganja smoking for keeping up on night duty. Afterwards his brain was so much deranged that he was kept under observation at the Civil Hospital at Bhandara.

He was not admitted in the Lunatic Asylum as his insanity was of a temporary nature. He never recovered, and died in the same temporary insanity kept up by ganja smoking.

I learn that the late Station Master of Kamptee, Balajee Gunpath, died by excessive smoking of ganja at Nagpur.

47. The moderate use of ganja smoking is not hereditary, and it does not affect the children.

48. Excessive habit of ganja smoking is not hereditary, but it affects the health of the children, as they are generally weak and pale.

49. The moderate use of ganja is practised as an aphrodisiac. It is used by prostitutes. I do not think that moderate use is more injurious than ordinary narcotic: moderate use of hemp does not tend to produce impotence.

50. I believe excessive use of this drug is generally made by prostitutes and others as an aphrodisiac. This is smoked generally after smoking opium. When used excessively it is more injurious than ordinary narcotic, and tends to produce impotence.

51. The large proportion of moderate smokers of ganja are not generally bad characters, and moderate smoking of ganja has no connection with crime.

52. Large proportion of excessive smokers are bad characters, such as habitual thieves, prostitutes, companions of prostitutes and habitual debauchees, generally indulge in excessive use of this drug. The only connection it has to crime is to satisfy the cravings of this vice.

53. See case cited in Questions Nos. 45 and 46. Excessive indulgence does make a man of irritable temper and for slight provocation cause the person to commit atrocities.

54. Yes.

55. I don't know of any such cases. I do not think complete stupefaction can be induced by this drug without admixture.

56. In the admixture mentioned in Question 19 the effect of ganja (b) is modified as to convert it into a cooling drink. In excessive use in admixtures the effects are not speedily felt but last long. With regard to dhatura admixtures, see my answer to Question 29.

57. I cannot tell as I have not personally watched the effect of it.

58. I am in favour of the present system of selling ganja to wholesale vendors, who sell to retail vendors at a certain price. The price at which it is sold will be always a check to excessive use. I am against the farming of ganja to contractors as the Government has no control on its consumption under that system. Ganja is not produced in Bhandara district.

61. Charas is not produced in Bhandara district.

62. I cannot answer this question.

63 and 64. None.

65. With reference to country liquor, I think the present taxation on ganja, as sold by retail vendors to people, is rather high. Ganja is sold to vendors at Rs. 3 per seer, and they sell at Rs. 10 per seer to the public. I think the vendors should be bound down to certain maximum rate.

66. I cannot answer this question.

67. I have no other objection except the above. The large profit which wholesale and retail vendors make on the sale of ganja to the public should be stopped.

68. None.

69. No, I think the wishes of the people should be consulted.

70. None.

Oral evidence.

20. Powars and Lodhis smoke a great deal. The Kunbis, who are also cultivators, hardly smoke at all. So do several other classes.

27. (c) It is among Powars and Lodhis that ganja is not considered so disgraceful as opium or liquor. This is not the general opinion.

29. The people generally do not use dhatura. Only few of the Gossains use it: those who require great intoxication. I have heard of nuxvomica being similarly used, but not arsenic.

32. This answer also applies to bhang. Bhang is used in the Holi; but it is not enjoined. The obligation referred to in my Answer 27 (a) rests only on Gossains, who, as devotees, are privileged to use ganja to produce concentration. In my answers generally, I include bhang in ganja,—for it is chur which is used as bhang in Bhandara.

35. Ganja smoking is so general, that its prohibition would lead to illicit consumption. In the second place, detection of illicit growth would be very difficult.

42. By the words "as far as ganja is concerned," I mean to exclude admixtures, not to exclude bhang. So also in Answer 43.

45. Amdoo was sentenced to ten years' imprisonment. The plea of insanity being in the family was raised, but failed. The father said the accused smoked ganja to excess, and that he learned it from farm servants. He did not drink. I knew him personally before the case. The

accused pleaded insanity; but ganja was not mentioned in the case. I was specially instructed not to mention the ganja. The father did not volunteer the statement about the ganja. I asked him when the ganja marks on the hand were seen. I never asked about dhatura. The accused was about 29 or 30 years old.

46. Nilkant's insanity was recurrent. He died two years after being in hospital. He recovered from time to time; but the use of ganja brought back the insanity. He was brother of my clerk, and I knew him well. He did not take any admixture, I believe. He was, I was informed, removed from his office on account of this. This was ten years ago. He was not violent but incoherent in his talk. Raghoonath Rao, Nazir, now pensioned, knows the case, as Nilkant was his brother. The second case occurred three years ago. I might find a relative of Balaji's.

48. I cannot specify cases here; but I think this so.

50. Opium does not take quick effect; so ganja is used immediately after it, sometimes to increase the rapidity of intoxication. The opium is used because the ganja would too soon lose its effect. The combined use is regarded as very effective. It is only rarely used by very debauched persons, who also are accustomed to these drugs.

65. Ganja is still the cheapest intoxicant. I do not think the equalisation of ganja with liquor would be harmful. I only wish to have a larger share of the profit of the vendor go to Government. I do not, however, think that the duty should be much raised; for I think that the people should not be driven to liquor. That is worse than ganja. Opium also is worse than ganja, whether the opium is eaten or smoked.

73. Evidence of Mr. J. A. MAUGHAN, Manager, Central Provinces Collieries, Umaria, Jubbulpore District.

1. From witnesses here, viz., Ganga Singh, Thakur, Pound-keeper, camp Umaria; Munavar, Engine-man, camp Umaria, and others.

2. The definitions are applicable to this part.

3. It is not known to grow spontaneously here.

7. There is no cultivation of hemp in these provinces.

14. Ganja, charas and bhang are not prepared in these provinces.

15. Preparation of bhang:—Leaves washed thrice, fresh water added and strained off each time; then to the mass is added the powders of pepper, anise, almond, and cardamom, and sugar and milk. This is supposed to be a cooling drink and used in the hot season. Pills are made for the rainy season with the same ingredients except milk. The whole thing is fried and used in the cold season. Pepper is a necessary ingredient in all these preparations.

16. Bhang is prepared at home in Holi and Shivaratri festivals.

18. The preparations do deteriorate by keeping, in which case they lose to a great extent their intoxicating effects. They will keep good a year. Damp causes deterioration, and to keep them good, you must keep them dry in air-tight receptacles.

19. Ganja and charas are used only for smoking.

20. Fifty per cent. of lower classes smoke ganja and charas. Here (in Umaria) nearly 21 per cent. smoke ganja, but charas is not sold here. Ganja-smoking is not confined to any class, though the majority of smokers are among the lower classes.

21. Smokers prefer baluchur as a rule, but this variety is not obtainable here. Flat ganja is the variety used here. It is called ludori, being imported from Indore territory.

22. Foreign charas is imported from the North-Western Provinces and the Punjab.

23. Bhang is never used for smoking.

24. Drinking bhang is not confined to any particular class, but the higher classes use bhang. It is not common here.

25. It is on the increase.

26. Nearly 10 per cent. are habitual excessive consumers.

27. The lower classes mostly, as it is supposed to make a person insensible to hard labour and fatigue. The higher classes are not allowed to smoke ganja, but eat or drink bhang as a luxury.

28. Ganja—

(a) One party gives me $\frac{1}{2}$ tola— $\frac{1}{2}$ a pice; another witness says half a tola—cost half an anna.

(b) One witness says one tola—worth one anna, and more if they can afford; another witness says two tolas—two annas.

Bhang—

(a) One chatak—cost 9 pies.

(b) Two chataks—cost 18 pies.

29. Ordinary tobacco is mixed with ganja and charas. Dhatura is a rare admixture, and it is not mixed here.

30. Nearly 80 per cent. of smokers practise smoking in company. Only excessive smokers smoke in solitude and consume as much as $\frac{1}{2}$ a tola; but they also seek company in smoking. Bhang is used in solitude by those who take it for medicinal purposes. Habitual consumers are male adults. The habit is easily formed and comparatively easy to break off.

31. There is no tendency in any of these drugs to develop into the excessive.

32. These drugs are used during the Holi and Shivaratri festivals. The plant is said to be sacred to the god Shiva and Mahadeo, and flowers either fresh or dried are used as an offering to these gods, especially on the Shivaratri day. The use is considered essential, and the habitual smokers of ganja generally smoke it to excess. Many take bhang also to excess. This is not likely to lead to the formation of habit. Excessive use is considered injurious, especially if the man does not take sufficient nourishment.

33. Ganja and charas are held in disrepute by the higher classes, and any excessive smoking of ganja or eating and drinking of bhang, is held to be disreputable. I have never heard of the plant being worshipped here, but the Gonds in their hill homes are said to be worshippers of these plants.

34. Bhang is not much used here, nor is charas. If smoking of ganja is prohibited, the privation of it will not be felt seriously, but might be felt for some time.

35. It would be feasible to prohibit the use of these drugs where the plant is not cultivated and does not grow wild. The illicit use of these drugs might be carried on as long as money and a little trouble could procure it. The discontinuance of the use of these drugs would not be likely to cause such discontent as to amount to political danger. The prohibition would in all probability cause recourse to be made to alcoholic stimulants and other intoxicating drugs.

36. There is no such reason.

37. Charas is stronger in its intoxicating powers.

38. The three different preparations of ganja have no different effects, except baluchur which is more intoxicating.

40. It is prescribed by native doctors as a tonic. It is supposed to create appetite and aid digestion.

41. Moderate habitual use of ganja, charas and bhang is supposed to be beneficial in its effects for (a), (b), (c), and (d). The moderate occasional use is supposed to relieve pain. It is used mostly by the lower and working classes, and it is harmless when moderately used with sufficient food.

42. According to information received and quoted in paragraph above, the moderate use is harmless.

43. Moderate consumers are inoffensive to their neighbours.

44. Moderate use is refreshing and creates appetite. If little extra is taken, intoxication is produced. The effects last for an hour or two. The after effects are weakness and laziness, and occasionally produce fits of coughing.

45. The habitual moderate use of these drugs without sufficient nourishment, makes a man physically weak and silly. It brings on asthma; it impairs digestion; it induces laziness and habits of immorality.

Yes; it does produce insanity, by causing abnormality in the quantity of blood supplied to the nerve centres. The insanity takes the type of partial monomania; it may be temporary or permanent; and the symptoms may be re-induced by use of the drug after liberation from restraint.

47 and 48. Children may take up their habits by imitation, but there is no hereditary tendency.

49. The moderate use of these drugs is practised as an aphrodisiac.

50. Excessive use produces impotence to a slight degree.

51. Almost all bad characters are addicted to the use of some one of these drugs.

52. Chevers says:—It is a matter of popular notoriety, both in Bengal and the North-Western Provinces, that persons intoxicated with ganja are liable to commit acts of homicidal violence. In cases of "running amok," the criminals are known to have taken hemp with the object of nerving themselves for the deed.

53. One witness says these drugs are inoffensive in this respect.

54. *Vide* No. 52.

55. Majum, which contains dhatura, is said to have been used for criminal purposes.

56. Sadhus and fakirs sometimes mix dhatura seeds for personal use. It is also mixed with ganja when given to others to produce stupefaction with intent to crime.

57. They are never eaten.

58. I regret I am unable to give an opinion.

70. Any drugs that are used here are obtained from the Rewa State, as there is no drug shop in the camp.

74. Evidence of BAZONJI DADABHOY, Parsi, Manager of the Empress Mills, Nagpur.

I am desired to give evidence specially as an employer of mill labour.

1. For the last 17 years I have been in charge of these mills, employing from 1,500 to 3,000 work-people, including women and children.

45. I have had no experience of any ill effects of hemp drugs on the work-people.

20. From enquiries that I have made, since

receipt of the printed questions, I have not been able to discover more than nine male adults out of a number of 1,900 who acknowledge being habitual consumers of ganja. There is no doubt of there being a larger number, which is estimated at from 5 to 15 per cent. I am inclined to believe the smaller percentage. However, I have been unable to elicit the fact from the men themselves. Besides the nine men, two acknowledged having

contracted the habit once, and given it up afterwards.

30. The women and children are not known to smoke ganja. The habitual consumers say that they have taken to the habit of ganja smoking, because prescribed by hakims for some ailments, or because they had been pressed in the beginning by their companions to join them. Two of the men have been smoking ganja for the last 20 years. They generally smoke once at night after meals at bed time. Some smoke the residue early the next morning. Some prefer to smoke before meals.

28. The ganja each man smokes is a piece worth, weighing about $\frac{1}{2}$ tola. The monthly cost to each man is from 6 to 8 annas. On holidays, when they have nothing to do, or when friends visit them, or they visit friends, they may have one or two extra smokes.

41. They all believe that it has a soothing effect, and it alleviates fatigue.

43. They are not excited nor become quarrelsome, but are generally peaceful and inoffensive. Even when they have extra smokes, they experience a sort of dull, stupefying sensation, nothing more; and they soon get over it, say in about half an hour's time. They generally do not take liquor or opium in any shape, because they are both costlier.

22. Charas cannot be had in Nagpur, and is not therefore used. Sometimes a friend, coming from another province, might bring some with him, when they may be asked to share it. It is far stronger in effect than ganja.

24. Bhang is made at home, but seldom indulged in, because it is more expensive, as it requires a mixture of spices, milk, etc. It is drunk on festive occasions, when women and children also join.

41. The habitual ganja smokers say that when they miss smoking, they suffer from flatulency and indigestion. They further believe that they are

generally free from ailments, though some say that they are more subject to cough. They also believe firmly that if they go to some other place for a change or for their livelihood, they are not affected by the "water" of the strange place as other people generally are.

20. Ganja is always mixed with tobacco for smoking purposes.

42. From what the smokers say, ganja smoking seems to me to be a harmless, if not a beneficial, habit; and, if stopped, the men will be driven to costlier and more injurious habits of liquor drinking or opium taking in some shape or other. I believe the price is sufficiently high to check excessive consumption.

Of course there must be excessive consumers, but they can hardly belong to the working classes.

44. So far as our men are concerned, during the long period I have been with them, I have only had two instances in which I suspected that ganja had stupefied the men. But in both instances, the men denied it, and said it was due to tobacco only. One of them was a lad of about 14 years, who had become stupid and helpless, and complained of seeing ghosts. He was sent home; but was back to work the next day. Another was a grown-up man, who was also stupid, and could not understand what was said to him. He had about half an hour's rest, when he recovered and resumed his work.

30. We have a place set apart for smokers, who are allowed to smoke at certain times of the day only. Men smoking ganja are seldom found there.

You will notice that I have not much to say in this matter, and I have therefore preferred to state what I have learnt from enquiry in this form, and not endeavoured to reply to the printed questions in their order, as I have no further knowledge or experience of the subject.

75. Evidence of RAI BAHADUR KUSTOORCHAND DAGA, Bania, Banker, Kamptee, Nagpur District.

1. From conversation which I had from ganja contractors.

7. Nimar district.

9. It is generally cultivated after the method of rabi crops.

10. No special class, but like other agricultural cultivators.

13. The cultivation is restricted in Central Provinces, except Nimar district. If restriction is removed, several other districts may produce the ganja crop. The reason of restriction is not known.

14. Ganja and bhang only in the Nimar district.

18. Deteriorates after two years.

19. Charas is not seen in Central Provinces, and ganja is generally used for smoking.

20. About 30 per cent. of the population in these provinces and in all localities.

21. Flat ganja is used in Central Provinces. I do not know the other kind used in other provinces.

22. I know only one kind of charas, and it is imported from Punjab chiefly.

23. No.

24. All classes, and in about 40 per cent.

25. The use of ganja and bhang seems on the increase, the rate being cheap in comparison to opium.

29. (a) Tobacco is generally mixed.

(b) Dhatura is mixed, the object being to make its intoxication more strong.

30. The consumption of bhang and ganja is invariably practised in solitude and in company. It is mainly confined to the male sex, especially to mendicants. The female sex make use of these drugs, but very sparingly; but not the children.

31. At first it is easily formed, but afterwards it is difficult to break it. Yes; moderate habits are generally developed into the excessive.

32. As far as I know, there does not exist any social or religious custom for bhang. It is temperately used in hot seasons to depress the heat.

33. The practice of these drugs is not very favourably regarded in excessive use. I know not any custom to worship the hemp plant.

34. It would be a kind of privation to consumers.

35. It would not be feasible to prohibit the use of any of these drugs.

36. Alcohol cannot be substituted for these drugs, as many people will object on caste and religious restrictions.

40. Bhang and ganja leaves are sometimes used for medical purposes, and for treating cattle disease.

41. Bhang is a food accessory; but is defective in digestive power, and also used as a preventive for cholera. Moderate occasional use.

42. In my opinion, moderate use of bhang and ganja is harmless, as the consumers do not do any harm simply by moderate use.

43. Yes.

44. It is refreshing and produces intoxication and creates appetite. The effect lasts from three to four hours. Yes; the want of subsequent gratification does produce longing and uneasiness.

45. (a), (c), (d) and (e) No.

47. No.

49. Neither one nor the other, in my opinion.

54. I don't think so.

55. Yes, the admixture of dhatura or arsenic will bring complete stupefaction as well as a strong dose of bhang to non-habitual drinkers.

63 and 64. No.

67. Moderate reduction is needed.

76. *Evidence of LALA NUNDKESHORE, * Agarwal, Merchant, Banker, Contractor, Malgoozar, Honorary Magistrate, Secretary, Municipal Committee, and Member, District Council, Saugor.*

1. I had ample opportunities of coming in contact with persons addicted to ganja, charas and bhang in these and other provinces.

2. Definitions herein given may be accepted. Ganja is locally known here as baluchur (round), harial (flat), and chur (broken ganja). Bhang is also locally known as buti; sometimes bhang is sub-divided into minor groups according to quality, such as duba or dudia, ganjery and Behraich.

3. It grows in Gwalior, Indore and Ratlam territories, and in the Khandwa district of this province. It is also known to grow in Marwar and North-Western Provinces, as well as in the Feudatory States of the Chhattisgarh Division.

4. All these are the products of the same plant, differing only in effect on account of different kinds of soil and climate.

5. It grows abundantly in hot climates and where the soil is "moond," and in yards which are sufficiently manured.

6. The growth of the wild hemp is ordinarily dense.

7. Yes. In Khandwa District for production of ganja and bhang only.

8. Cannot say.

9. The soil is well ploughed and manured, and then seeds are sown.

10. It is cultivated particularly by Lodhis, Kurmis, and Kunbis, and ordinarily by all agriculturists.

11. The seed of the wild hemp is very seldom used for the production of ganja.

12. The wild hemp is especially cultivated for the production of ganja in districts mentioned in answer to Question 3.

13. The cultivation of the hemp plant for ganja is restricted in all the districts of this province except Khandwa, where its growth is both spontaneous and cultivated. Special conditions are stated in answer to Question 5. In my opinion its cultivation is nowhere impossible in this province, more or less according to the nature of soil.

14. The ganja and ganjar bhang are prepared in Khandwa district to a great extent. Khandwa is therefore the emporium of trade supplying to all the districts of this province. (The quality of bhang supplied to these provinces from Government emporium is very inferior.)

15. Ganja is prepared when the shoots at the top get ripe. They are cut and pressed underneath heavy loads or some weights. Before the ganja is completely dry, it is exposed to the air and then used. Bhang is prepared from the leaves of the plant when the shoots are not fully ripe.

There is little or no distinction between the cultivated and the wild plant. For smoking purposes it is first cleared of seeds and veins, then placed on the palm of the left hand with a few drops of water, and well rubbed with the thumb of the right hand till it becomes soft, when a little tobacco is mixed and smoked in a *chillum*. Bhang is eaten in the form of *tali* and pills, etc., mixed with sugar or treacle. Bhang is also used for drinking purposes. It is first washed, then powdered and mixed with massala, water, milk and sugar, and then drunk.

16. Yes; bhang is prepared by the people in their houses. Yes; it can be prepared from the hemp plant, but not of all sorts. Yes; ganja and charas can be prepared from the plant wherever grown. Charas can be prepared only where the growth of the hemp plant is dense and in abundance.

17. By people of the agricultural classes, but especially by those mentioned in answer to Question 10.

18. Ganja and bhang deteriorate by keeping, while charas improves in quality. It does not lose its effect if kept carefully for two or three years at the most. The damp and moist atmosphere in the rains are the causes of deterioration. If the seeds are separated, and due precaution is taken to keep it from damp and moist, deterioration is prevented.

19. No. They are used for smoking in general and for medicinal purposes in particular. In cases of diarrhoea and dysentery and in fever, it is made into a paste and rubbed all over the body.

20. Fakirs and Bairagis, performing penances, invariably smoke, also some house-holders, without any distinction of caste. Day-labourers doing hard work generally use it everywhere.

21. Round ganja or (baluchur) is preferred for smoking. Flat or (harial) and chur are used in the Central Provinces, while baluchur chiefly in North-Western Provinces and other Native territories.

* Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

22. Native charas is chiefly used.

23. No.

24. Marwaris and Mathra Chaubes in general, and Pandits in particular, eat and drink bhang according to their convenience.

25. The use of ganja, charas and bhang is on the decrease on account of their being dear, and also for the tendency of the people towards local and foreign liquor.

26. Cannot answer this question.

27. I have answered this question to some extent in my reply to Question No. 24, but I cannot say about the extent of habit of each.

28. Cannot state this question definitely, as the price varies in different districts and provinces as well as in Native territories.

29. In ganja, the ordinary ingredient is the dry tobacco leaf, the exceptional ingredient is *atar*, musk, cardamoms, cloves, mace, and nutmegs. No; the dhatura is not so used.

The object of these admixtures is to make it palatable and more intoxicating. Yes, bhang massala contains the following ingredients:—anise, kasni, coriander, almond, cucumber seeds, lotus seeds, opium seeds, rose flower, black pepper, cardamom, saffron, milk or curd, and sugar. Habitual excessive consumers do sometimes mix dhatura seeds. Generally during the Holi festival confectioners in general, and house-holders in a few cases, prepare majum by heating bhang with water and ghee. The ghee when well boiled is taken out and mixed with syrup, and again put on the fire till it turns into a solid paste, which is artistically cut into small pieces and eaten.

30. To a great extent the consumption is practised in company. Yes; it is mainly confined to the male sex and to adults.

31. Yes; it is easily formed. Yes; it is difficult to break it off. Yes; it has a tendency to develop into excessive habits.

32. In the Holi festival of Hindus, bhang is generally used as a religious drink in shape of liquid, as well as majum and *tali*. In connection with such custom it is not regarded as essential. It is on such occasions generally excessive. No; it does not lead to the formation of habit, but it may prove injurious if taken in excess. I know that the Bengali community of all classes use bhang in liquid form in Dasera, when it is commonly called Vijaya.

33. The consumption of these drugs is generally regarded by the people at large with indifference. But persons habitually addicted to ganja and charas are held in low estimation by the community. Nothing except in the case mentioned in Answer 32. The use of any form of the narcotic is generally held in disrepute, because it deranges the brain, etc. No; there is no custom of worshipping the hemp plant as far as I know.

34. It will be a serious privation in case of fakirs and ascetics performing penances, inasmuch as they think they cannot properly meditate without it.

35. It would be feasible. It can be consumed illicitly if available. The prohibition can be enforced by discontinuing the cultivation and destroying the wild growth throughout India. No; the prohibition will occasion no serious discontent, nor is there any probability of a political danger. Yes; the prohibition will be followed for a time only by recourse to alcoholic drinks as well as to other drugs, such as opium, etc., so far as available.

36. Yes; alcohol is now being, to a certain extent, substituted for all these drugs, because ganja, etc., produce stupor, while alcohol is exhilarating. We witness this transition in everyday life.

37. Charas is more strong than ganja.

38. Round (baluchur) ganja is more intoxicating than its other preparations.

39. Smoking of ganja and charas is more injurious than eating or drinking of bhang, inasmuch as in the former case the smoke rising into the brains deranges them and results into madness, etc.

40. Yes; ganja and bhang are used in medicinal purposes. They are also used in the treatment of cattle disease.

41. The moderate use of ganja, charas or bhang is beneficial in its effects—

(a) as a food accessory or digestive;

(b) to give staying-power under severe exertion or exposure or to alleviate fatigue.

(c) as a febrifuge or preventive of disease in malarious and unhealthy tracts.

The use of the drug for the above purposes is not strictly confined to any class or classes of people in particular. I refer to the moderate use of the drug.

43. They are not offensive.

44. The immediate effect of the moderate use of any of these drugs on the habitual consumer is refreshing and productive of intoxication, and creates appetite. The effect of intoxication lasts at the most for two hours. The after-effects are melancholy, stupor, and drowsiness. It does produce longing and uneasiness.

45. (a) No; if ghee is taken in sufficient quantity.

(b) Yes; it does if underfed.

(c) No.

(d) It does not cause dysentery, but it does produce bronchitis and asthma.

(e) It does impair the moral sense, and induces laziness.

(f) No; in moderate use.

46. A habitual excessive use of ganja and charas deadens the intellect and produces insanity of a temporary type, if the use of these drugs is discontinued. If not, the effects of insanity become permanent. The typical symptoms are—(1) the pupil of the eye is dilated, (2) the insane is harmful, and (3) appetite is lost. People suffering from mental anxiety, or brain disease, if habituated to these drugs, may find temporary relief, but in the long run they must suffer from insanity. In one instance I have seen a well educated young man, by the excessive use of the ganja, subject to temporary insanity. In another instance a man suffering from mental anxiety could hardly find relief unless he was under the effect of this intoxication.

47. No.

48. No. Excessive smoking affects the progeny mentally.

49. It is an aphrodisiac in moderate cases to a certain extent. It is so used by prostitutes in rare instances. The use is more injurious, inasmuch as it brings on general debility. It tends to produce impotency in some cases.

50. It is not an aphrodisiac. It is so used by prostitutes in rare cases. The use is more injurious in general debility. Excessive use produces impotency.

51. No.
 52. Yes.
 53. Yes. I have seen a case in which it has led a consumer to temporary homicidal frenzy.
 54. Yes.
 55. Yes; in some cases. Yes; in both instances.
 56. In my opinion they are always used in excess of admixture. The admixture of dhatura is generally used for administration to others to stupefy and to overcome the victim.
 57. They are eaten or drunk as medicine.
 58. The system of giving rewards to the informers for arresting persons selling or using these drugs unlawfully is in more instances harmful,

inasmuch as persons with a view to obtain rewards by foul means put these drugs into the possession of their enemies; otherwise the administration seems to work satisfactorily.

59. The system of giving rewards should be put a stop to for reasons given above.

60. No.

61. Charas is nowhere produced in this province.

62 to 69. No.

70. Yes. The poor classes who are habitual excessive consumers use untaxed drugs from Native territories.

77. *Evidence* of GIRDHARI LAL, Oswal Bania, Merchant and Banker, Seoni-Chapara.*

1. Only general observation as regards ganja. Bhang I indulge in myself, but only in the season of Holi, say the month of Phagun (March-April).

2. Definition of ganja is correct. But the bhang, of which people drink a decoction, is not the dried leaves of the ordinary hemp (ganja) plant, but of a fine quality of the plant grown in Malwa and Marwar. I have to get my bhang from Nagpur. It is not sold in the Seoni district.

3. I know of no district in which ganja grows spontaneously. Occasional plants grow in this district from seed that is found in purchased ganja and thrown away.

15. For a party of eight I would first soak 1½ to 2 tolas weight of bhang in water for half an hour or more, and then throw away that water and wash the leaves out besides in four or five other waters, so as to get rid of all colouring matter. Then I would have the soft leaves ground up with badam (almonds), rose flowers, cucumber (kakri) seed, khasskhass (opium seed), black pepper, jaifran (kesar), sont (ginger, dry), kasni; and then the resulting paste would be divided between 4 lotas, containing about 4 seers of cold water, and after soaking and mixing these for about an hour, the decoction would be strained and drunk like tea, with milk and sugar to taste.

19. Ganja is used only for smoking. An ointment is also made from ganja with admixture of salt and ghee, which the barbers rub on fever patients. After being well rubbed with this ointment, the patient is covered with blankets, and a copious perspiration results.

20. I consider that about half the male adult population smoke ganja.

23. Bhang is never used for smoking. People do not eat bhang.

24. About 10 per cent. of the adult males and 5 per cent. of the adult females drink bhang. They cannot get good bhang under present excise arrangements; so, in default of better, prepare their decoction of bhang from the leaves included among the stuff issued as ganja from the Khandwa Government store.

25. The smoking of ganja is on the increase, especially among the labouring classes. I speak from general observation of four or five years past. I cannot say anything regarding former custom. I took no notice previously.

26. I estimate that only 20 per cent. of the ganja smokers are occasional consumers; the remaining 80 per cent. are habitual consumers. I consider the whole 100 per cent. to be only moderate consumers. I know of no excessive consumers. Excessive consumers are the rare exceptions.

27. The labouring and artisan classes are habitual smokers of ganja, especially Gonds, Pardhans, Nais (barbers), and masons. The hard work and the exposure lead them to refresh themselves with three or four whiffs of ganja a day. Under its influence they do not feel either the sun or fatigue. After a smoke of ganja, the smoker ceases to be thirsty or tired.

28. Ganja smokers, as a rule, only smoke ganja two, three, or four times a day. I have not come across any who smoke ganja more frequently. One pice worth of ganja, mixed with tobacco, is the usual fill of a pipe. As a rule, one person does not smoke off such a pipeful himself; he smokes it with two or three others, passing the pipe round from one to another for a draw. In absence of any one to finish the smoke any habitual consumer could smoke off such a pipeful without its affecting his ability to proceed with his work or journey.

29. Tobacco is the only ingredient ordinarily mixed with the ganja. The proportion is about three parts ganja and one part tobacco. Just sufficient water is added to moisten these ingredients, and enable the consumer to rub them well together with his thumb in the palm of his hand. No one smokes unmixed ganja; all mix tobacco with it. A few add a little opium to obtain a more staying exhilaration or intoxication—not more than one per cent. of consumers; and this, too, only exceptionally on their part. I have heard that dhatura is sometimes mixed with ganja; but I have never come across such cases. The effect, I believe, is at once to incapacitate the consumer. No ready-made bhang massala is sold in this district.

30. Not more than 5 per cent. of ganja consumers smoke in solitude. Ganja smoking is essentially a sociable custom. The pipe is passed round to neighbours for a whiff. The usual number to share one pipe is three. In a party of three fellow-workers, one will provide the pipeful on one occasion, another on the next occasion, and so on.

Ganja smoking is confined chiefly to the male sex. Not more than 5 per cent. of ganja smokers are women. Ganja smoking is not peculiar to any special age. Boys begin from 12 to 15, following the example of their fathers and elders.

31. It is not easy to learn ganja smoking. People have to learn by degrees. A fellow takes 15 days or a month to learn to smoke ganja with appreciation and enjoyment. Once learnt, the habit of smoking ganja is difficult to give up. There is a tendency, but it is not a strong one, for moderate consumers to begin to smoke ganja to excess. I cannot recall any instances of consumers who have taken to smoking ganja to a ruinous excess. The great majority continue to be moderate consumers for life.

32. I know of no custom, social, or religious, involving consumption of ganja.

33. Among classes and families, who do not smoke ganja, it would be considered a disgrace if one of their sons was to take to ganja smoking, and he would be given the reproachful title of "ganjeri." But among classes accustomed to ganja, no such reproach attaches to the habit. It is only prejudice on their part, for half the male population indulge in ganja without injurious effect.

I never heard of any custom of worshipping the ganja plant. I have, however, heard that some people consider ganja the (buti) flower of Mahadeo, and offer the flower (kali) of ganja in their worship of Mahadeo. But nothing of this kind has come across my personal observation.

34. It would be a serious privation to deprive habitual consumers of the ganja smoke to which they are accustomed. It would affect all their energies and their digestion, and lay them up more or less for a month. I say so from what I imagine. I have never known a case of the kind.

35. It would be feasible to prohibit the use of ganja. Is anything too difficult for the Sarkar? But let the Government first make certain that it is really for the good of the people to stop the use of ganja. If Government is satisfied on this point, two years' notice should be given by proclamation, that people may gradually accustom themselves to do with less and less ganja, till they can dispense with it altogether. I do not think the prohibition could be enforced by fine or imprisonment. If ganja smoking were made punishable, even after two years' proclamation, with fine of even Rs. 5, I apprehend that the jails would not be large enough to hold all the persons who would become liable to imprisonment. There would be a very general plotting to obtain the drug illicitly. Serious discontent would be roused, and there would certainly be riots.

Probably about 50 per cent. of the present consumers of ganja would bow to the proclamation and give up smoking ganja, 30 per cent. would submit after making all the commotion and resistance they could, and 20 per cent. would take to alcohol or opium instead.

I do not, however, advise any such attempt to suppress the consumption of ganja.

36. Alcohol has certainly not begun to supersede ganja in this district. One pice worth of ganja suffices for a chillum (pipe), which will refresh and invigorate three or four men. It would require a bottle of liquor to refresh them equally, and that would cost 2 annas or 2½ annas,—the whole of a labourer's daily wage. Ganja is the poor man's stimulant, and they cannot afford to take to liquor instead.

42. I do consider that the smoking of ganja is beneficial to the outdoor labouring classes. It enables them to endure fatigue and exposure, and to work on hard, without evil effects.

43. The moderate consumers of ganja are absolutely inoffensive to their neighbours.

44. I can speak for bhang because every year, in the season of Holi, I partake several times of bhang. Its effects are exhilarating but not intoxicating to extent of disqualifying for business, unless taken to excess. On the contrary, it makes me quicker and readier for business. It does not affect my shrewdness, nor dispose me to be weak in bargaining, or in according a lower rate of interest. Bhang does not allay appetite; on the contrary, it makes a man twice as hungry as usual. The effects of moderate indulgence in bhang pass off in about a couple of hours. It has no after effects, except to those who indulge in excess. After my indulgence in the season of Holi, I revert without uneasiness to my wonted abstinence from bhang.

45. The habitual moderate use of ganja is general in this district, and it has no injurious effect on the constitution; neither does it injure their digestions or affect their appetite; nor does it cause dysentery, bronchitis or asthma; nor make our labourers and artisans lazy or immoral; nor affect their intelligence or produce insanity.

46. I have heard of people going off their heads from excessive indulgence in ganja; but such cases are very exceptional. None has ever come under my personal observation.

47. The habitual moderate use of ganja has no effect of any kind on children. On the contrary our Gonds and outdoor labourers have notoriously large families, and their children are as strong and healthy as any one's. I never heard of any hereditary habit or taint in children of ganja smokers.

48. Even the excessive use of ganja does not affect the children of consumers who have a hard outdoor life, wherein they work off its effects. Near my neighbourhood there lives Dharmoo Kunjra, a Khatik, who sells fruit, vegetable, and spices, and cultivates his own land. He smokes five or seven chillums of ganja a day, which is excessive compared to other people. He has two very fine healthy children of 10 or 12 years of age.

49. I never heard of ganja in moderation either exciting or reducing sexual desire.

50. I never heard that excessive indulgence in ganja makes a man impotent.

51. Moderate indulgence in ganja is not more general among the criminal classes than any other. At least half the honest labouring classes of this district are addicted to the moderate smoking of ganja.

52. There is no connection between excessive indulgence in ganja and addiction to crime.

53. I never heard of excessive indulgence in ganja developing a homicidal tendency.

54. I never heard of criminals fortifying themselves with ganja or bhang before commencing a premeditated crime.

55. I never heard of criminals using ganja to stupefy their victims before robbing them.

56. I have heard of hardened ganja smokers mixing dhatura seed with the ganja they smoke to increase its intoxicating effect; but I have no special information on the subject.

58. I am satisfied with present excise arrangements as regards both ganja and bhang. I get what little bhang I use from friends returning from Marwar. There is no occasion to make foreign bhang more easy to buy.

65. I consider it unreasonable that the wholesale vendor of ganja should be bound to sell to retail vendors at Rs. 3 per seer, while no restriction is placed on the amount which retail vendors may charge. The result is that the poor have to pay at the rate of Rs. 10 per seer. I think retail vendors should be restricted to a maximum charge not exceeding Rs. 5 per seer. This would be a great help to the poor, and not reduce Government revenue. It would not result in any injurious excess of ganja smoking. The labouring poor need their ganja, and it does them good and not harm.

69. There is no harm from a ganja shop that its location in a public place should be objected to, and no one entertains any such objection. It is a public convenience to have a ganja shop in the bazar.

Oral evidence.

Question 20.—In stating this proportion of consumers, I speak from my observation in the district in which I live.

Question 25.—I have observed the increase described. I can give no reason for it. Liquor drinkers have not turned to ganja. People are poor and ganja indulgence is cheap. Ganja does not save expense in ordinary food.

Question 26.—Fakirs sometimes consume ganja

to excess. Other people do not exceed 2 or 4 chillums.

Question 44.—I drink bhang on no occasion but the Holi. That is a convivial occasion, and so I take it then. I should not consider it any fault to take bhang day by day, but it would be very expensive, as I import my bhang from Marwar.

Question 45.—I have never seen any person become insane from ganja. I have seen people talk nonsense from ganja smoking, but I do not call that losing their heads.

Question 58.—All people cannot afford to import bhang from Marwar. It is proper that bhang should be expensive and ganja cheap. Poor people would never drink bhang. The ingredients required to mix with bhang are expensive.

Question 65.—The retail sellers make inordinate profits.

Question 59.—I do not think further restriction should be imposed on ganja or bhang. These things are expensive enough. One pice (3 pies) only suffices for one chillum, affording a draught to three or four people. If restriction were imposed, the ganja smoker would not take to liquor or dhatura. I can't answer for opium. I consider the hemp drugs as preferable to liquor. Opium intoxication comes slowly, and is in that respect inferior to ganja. I refer to opium eating. Madak smoking is the worst form of intoxication.

Question 30.—A few women do smoke ganja. They are women of lower classes, the same as would smoke madak. I do not know that they are prostitutes who indulge in this habit.

78. Evidence* of ONKAR DAS, Agarwalla Bania, Mahajan, Seoni-Chapara.

1. General observation ; nothing special.
2. Definition of ganja correct. Bhang and charas not sold in this district. I have seen them when visiting my native country, Patiala State, in the Punjab.
3. Ganja does not grow spontaneously in this division, and I never heard of its growing unsown. Sometimes plants grow from seed rejected and thrown away out of purchased ganja.
14. Ganja is only grown in the Nimar district of these provinces.
19. Ganja is only smoked. Exceptionally some chew ganja with opium, and swallow it: about 1 in 100 consumers, who desire strong intoxicating effect. Ganja is also given in gur as a pill for relief of persons suffering from ordinary fever and from dysentery. For dysentery patients opium is added.

Also bhang is boiled in water with a little ghee for about an hour, then the ghee is strained off, and used to rub on patients suffering from fever and sunstroke, and pains in the body. For persons who suffer from burning feet or palms of their hands, this ointment affords immediate relief. Also bhang is toasted in a pot over fire, and then mixed with gur and given as a tonic to cattle and horses. It relieves a tired animal and restores his appetite.

20. This town of Seoni contains about 12,000 inhabitants. Women and children do not use ganja. Excluding them, I reckon that there are 5,000 men in Seoni, of whom 500 or 10 per cent. are more or less addicted to ganja. Possibly 1 in 100 women may indulge in ganja. All the labouring and artisan classes are addicted to ganja.

23. Bhang is not used for smoking.

24. Bhang is not eaten in this place, only a decoction is prepared from bhang for drinking.

25. The use of ganja seems to be on the increase. I can assign no special reason. The use of all intoxicants is on the increase; not ganja more than opium or liquor. I believe that the use of ganja used to be much more than at present. Since Government have restricted the cultivation, less ganja is being used, though the Government sales show increase. I believe the increase in sales of duty-paid ganja results from more and more complete stoppage of the consumption of illicit ganja. Formerly people used to grow ganja, every man in his own bari. I remember when ganja was selling at 8 seers for the rupee, and imported ganja at 4 seers per rupee. This was 25 years ago. Now ganja is sold wholesale to retail vendors at Rs. 3 per seer, and is retailed at rates averaging Rs. 10 per seer. Of course consumption must have been checked.

In the same way the use of bhang is being checked by the difficulty of getting the good foreign bhang.

26. Out of every 100 consumers of ganja, I estimate—

- (a) 20 per cent. to be habitual moderate consumers.
- (b) 10 per cent. habitual excessive consumers.
- (c) 60 per cent. occasional moderate consumers.
- (d) 10 per cent. occasional excessive consumers.

100

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* Translation.

27. Class (a) includes chiefly hard-worked labourers, who take an occasional whiff of ganja, three or four times a day, to relieve their weariness, or just as they lie down at nights to set them asleep and assist digestion.

29. Tobacco is ordinarily mixed with ganja for smoking purposes. Occasionally dhatura seed is mixed with ganja; this is by people who suffer from asthma; an exceptional few mix dhatura with ganja to enhance the intoxicating effect. Traveler-thieves are credited with administering dhatura with ganja to their victims; it makes them temporarily insane for about three days.

No special bhang massala is sold for admixture with bhang.

30. About 20 per cent. of the ganja smokers smoke in private, and 80 per cent. in company. Out of every 100 consumers, about 10 per cent. are women, 20 per cent. are boys, 70 per cent. are men. Boys of the labouring and ganja smoking classes begin to smoke ganja from 12 years old and upwards: result of example, because they think it manly.

31. Smoking of ganja has to be learnt by degrees. Beginners get the last whiff, or have to avoid taking a full whiff: they acquire the habit in two or three months, and become confirmed habituals after about a year. The habit once acquired is difficult to break off. If a smoker is deprived of his ganja, it affects his digestion, and his energies. As in the case of all intoxicants, the tendency is for moderate indulgence to increase, but not necessarily to excess. For instance, the 20 per cent. of consumers, whom I estimated to be habitual moderate consumers, are not likely to become habitual excessive consumers. They will probably require an extra whiff or more as they grow older, but having learnt to be habitual moderate consumers, they are not likely to become habitual excessive consumers.

32. There is no religious sanction for indulgence in ganja or bhang. Consumers of their own wrong-headedness and wickedness do take their pipe of ganja, or lota of bhang, to the temples and pour some of the bhang as an oblation to the gods, but this is quite against religion. They also offer a piece of ganja flower (kali) as an offering.

33. The consumption of either ganja or bhang is considered disreputable. The terms "ganjhar," a regular ganja smoker, or "bhangar," a habitual drinker of bhang, are terms of reproach. A parent, not himself a consumer, would grieve if he caught his son taking to ganja. Even if the parents being addicted to ganja thought little of their son taking to it, employers of labour and others would disapprove it.

The same reproach does not attach to the men occasionally partaking of a draught of bhang decoction in the hot weather as a cooling drink.

I never heard of any worship of the ganja plant.

34. I consider it would be a serious privation to the labouring classes to stop their smoking of ganja. Not only would they suffer from indigestion, sleeplessness and loss of energies for two or three months, but in the end, even they would not be able to undergo hard work or exposure as before, without fortifying themselves with some other stimulant. The labouring classes require their smoke of ganja.

35. The general consumption of ganja could be stopped by proclamation, allowing consumers a year's time to get over the habit by gradually lessening their consumption. After that, abstinence could be enforced by fine, not exceeding Rs. 50, with imprisonment in default of payment. The habitual ganja smokers would be driven to take opium or liquor instead. Their dissatisfaction would be exceeded by the satisfaction of the majority of ganja consumers thus forced to give up the habit. There would be no fear of a mutiny or the like from stoppage of ganja smoking; there would be much abuse of the Government and its officers by the ganja smokers, but no real danger to the State is to be apprehended from them.

36. Alcohol is certainly not superseding ganja as a stimulant. Who accustomed to intoxication or stimulant at 1 pie, which is about the price of sufficient ganja, would give that up to take to liquor at 4 annas an intoxication? Certainly not the poor labouring classes. No one, rich or poor, would give up ganja willingly to indulge in alcohol.

39. The smoking of ganja is more injurious than the drinking of a decoction of bhang. More people fall into excess over ganja than over bhang. If either ganja or bhang be indulged in to excess, the evil effects are alike. People go off their head from both.

40. The only medicinal use of ganja or bhang that I know of is in the form of ointment prepared from bhang for poor patients. Native hakims also prescribe a mild decoction of bhang to counteract or smother the violence of a fever. Ganja, as distinct from bhang, is not prescribed medicinally that I know of. For the method of preparing bhang ointment, see my answer to Question 19.

41. Ganja smokers certainly claim for ganja that it is good for digestion. It is also certain that, if habitual ganja smokers are deprived of their ganja, their digestive organs go all wrong. Ganja also does certainly give staying-power under severe exertion or exposure. A ganja smoker, for instance, could walk straight on and for a longer distance than a non-smoker. This is why the labouring classes so generally smoke ganja. Also ganja certainly enables the Gond to live under conditions of bad water, and malarial exhalations, which would soon kill a non-smoker of ganja. The habitual moderate consumers of ganja among the labouring classes and jungle tribes certainly benefit from ganja smoking. It is for the sedentary classes, and for those who are not subjected to bodily fatigue and exposure, that ganja smoking is not beneficial.

42. I do consider that the smoking of ganja is positively beneficial to the poor, who have to work hard in the open under exposure. With the help of a smoke of ganja, the labourer suffers neither from cold nor wet, despite insufficient clothing.

43. The moderate ganja smokers give no trouble to their neighbours. It is only occasional excessive smokers, and persons unaccustomed to ganja, who make themselves offensive under its influence.

44. I have no personal experience, but I have noticed the effect of a smoke of ganja upon the habitual moderate consumer. He returns refreshed to his work, and applies himself to it with zest; the effect does not make him spoil his work, or carry it out less intelligently. It allays hunger—a hungry man refreshed by ganja will work as well as ever. Its effect lasts for different periods

according to the man's habit. If he is in the habit of smoking ganja twice a day, the effect will last till his time comes round for another smoke. When it ceases to last so long, he will take to smoking three or four times a day to renew the effect. It is not usual to smoke ganja more than four times a day; the effect of more frequent indulgence is injurious. The moderate habitual consumer will become disinclined and unfit for work if he misses his smoke of ganja, and he will have a longing for another smoke.

As for bhang, I have noticed that in the hot weather many people drink a decoction of bhang as a cooling and refreshing beverage. It does not incapacitate the moderate consumer in any way; it creates appetite instead of allaying it. Such drinkers do not indulge more than once a day, generally about 4 p.m. It induces a motion, moves the bowels moderately, and after this the occasional consumer returns with appetite for his food, and goes refreshed to business. The intoxicating effect passes off after half an hour.

I have no experience of habitual consumers of bhang, or of persons who indulge to excess.

45. The habitual moderate use of ganja does not impair the constitution. On the contrary, it sustains the body under hard work and fatigue. The poor merely smoke ganja to sustain them at their work, and fortify them against the exposure, which would otherwise injure them. So long as they continue to get their accustomed smoke of ganja, it does not injure their digestion or lessen their appetite for food. It does not cause either dysentery, bronchitis or asthma; it is only excessive indulgence in ganja that causes asthma; moderate indulgence has no such effect on the working man. For the labouring man the habitual moderate consumption of ganja neither induces laziness, immorality or debauchery. It only has such effect on the man of sedentary or idle habits. For the man who works hard out of doors, ganja, in moderation, is good; for the man who lives an in-door life, it is bad. I believe it is only persons of sedentary in-door habits, and indulgers in ganja to excess who become insane from the effects of ganja. I have no personal knowledge of such cases.

46. The excessive consumer goes off his head, and speaks nonsense, and becomes violent and aggressive, and his constitution becomes enfeebled, and he coughs day and night.

47. Habitual moderate use of ganja is general in this district among the labouring classes, but it does not affect their children in any way. They are just as healthy and strong as children should be. I never heard of their inheriting a craving for ganja; but they do take to ganja, generally in moderation, as they see their fathers and seniors do.

48. Excessive indulgence in ganja enfeebles the man and his seed. I cannot call to mind any children whose feebleness of constitution I can attribute to their fathers having been excessive consumers of ganja. Neither in any assembly of children could a person pick out any as the children of indulgers in ganja to excess.

49. Ganja does not excite to sexual indulgence. On the contrary, it stops sexual desire, and it is, for this very reason, that Bairagis, Gossains and fakirs are great ganja smokers. The moderate indulgence in ganja has no such effect on the out-door workers. On the contrary, it is notorious that our Gonds and hard working labourers have large families.

50. Excessive indulgence in ganja does make a

man impotent, and that is why fakirs and others, who have given up thoughts of this world, take to ganja, so as to liberate their desires and enable them to concentrate their thought on duty and the next world.

51. The habitual moderate consumption of ganja does not operate in any degree to develop or encourage a disposition to crime. The mass of the labouring classes in this district are moderate and habitual ganja smokers, and the effect on men is the very reverse; it enables and disposes them to work hard, and that is what they smoke ganja for. Of course, habitual criminals, like others, indulge in ganja, but their criminal habits are not due to ganja.

52. Excessive indulgence in ganja would disqualify the habitual criminal just as it does any one else. Excessive indulgence in ganja has no connection with crime.

53. I never heard of any man killing people under influence of homicidal frenzy, the result of ganja. The murders in these parts are on account of women or for gain, and I have heard of murders under influence of alcohol, but not from effects of ganja. Our ganja smokers are not particularly addicted to violent crime; on the contrary, the patient industry of the Gond is proverbial. I have heard of bhang being used to incite to crime, and of bhang drinkers breaking out in homicidal frenzy, but there is no bhang drinking to speak of in this district.

54. I have never heard of persons smoking ganja to fortify their courage before commencing a premeditated crime. Ganja would incapacitate the would-be criminal, who is not an habitual. Criminals, like other people, smoke ganja, if from custom they feel the need of it.

55. It is a practice of criminals to induce intended victims to join in a smoke. They pretend the pipe is of tobacco only, but it contains ganja. The effect of even one whiff of ganja upon a person unaccustomed to it, is to cause instant stupefaction, when he can be robbed with impunity. Dhatura seed is mixed with the drug to disable the victim more completely, and prevent his recovering for two or three days. Even, without dhatura, a person misled into inhaling ganja would remain insensible for a whole day.

56. There are four or five persons in Sewan who mix ganja with opium and chew it. They are hardened consumers, but poor, so adopt this mixture to effect intoxication at small expense. They are enfeebled people, with ruined constitutions.

58. I have no improvement on present excise system to suggest as regards ganja.

It is just as well that bhang is not readily procurable.

63. It seems to me a defect that the wholesale vendor has to supply retail vendors at Rs. 3 a seer, whereas the retail vendors are allowed to charge what they like, and do, as a matter of fact, realize at Rs. 10 a seer. If the retail price were greatly reduced, there would be objection that consumption is encouraged. But, if the consumers have to pay Rs. 10 per seer, it does not seem to me good administration that Government should get no more than the Rs. 2-8 a seer or thereabouts, which the wholesale vendor pays to Government.

When the money is going, Government should arrange to get the lion's share. If ganja were issued from the Government stores in $\frac{1}{4}$ -seer bags, corresponding with the opium cakes, and issued

from the treasury direct to retail vendors, as opium is now sold, it would be easy for Government to realise Rs. 2 per $\frac{1}{4}$ -seer bag, or Rs. 8 per seer. It would be requisite, however, to ensure careful and honest selection of only the first class ganja for these $\frac{1}{4}$ -seer bags at the Government stores. At present, Tahsildars are subjected to great waste of time in cleaning the ganja issued by sackfuls from the Khandwa store. It would pay Government well to cause effective and honest selection there. It would be easy to provide damp and rat-proof store places at every treasury. The $\frac{1}{4}$ -seer bags should be sealed at the central store when filled.

68. Ganja is not a drug for which people collect in shops or houses to smoke together. The

habitual ganja smokers must have their whiff three or four times a day, and they carry it about with them. It never has been the custom for consumers of ganja to collect in the shops to smoke it together on the premises. The prohibition of smoking ganja in shop premises has, therefore, had no particular effect.

69. There are no complaints against the location of ganja shops. People have no objection to location of a ganja shop in a bazar. On the contrary, it is a convenience. The shop is no nuisance, for objectionable people do not assemble at or hang about the ganja shop. Ganja smoking is so common, that there is no prejudice against the shop.

79. Evidence* of HUSEN KHAN,† Pathan, Abkari Contractor, Seoni-Chapara.

1. I have been retail vendor of ganja for some 17 years, and at present hold the lease of five ganja shops in this district. I was wholesale vendor for four or five years. I take the leases in name of my agent, Karim Baksh, and am recorded as his surety.

2. The definition of ganja is correct. The dry leaves of all hemp are called bhang, but the leaves of the Nimar plant do not make good bhang. When I was wholesale vendor, before Government took to burning the bhang of the Nimar plant as refuse, I used to sell it cheap, at the rate of two or three seers per rupee, in contrast with picked ganja at about half the quantity per rupee. This was twelve or fourteen years ago, before the present system, and I got my stock then from Katol (Nagpur district), not from Nimar.

3. I know of no district where the hemp plant grows spontaneously. It occasionally grows from seed that people throw away out of purchased ganja.

7. The ganja we sell is procured from Khandwa, where ganja is grown under Government rules and restrictions,—*vide* Abkari Manual, Chapter V. It is only grown for ganja.

14. In the Central Provinces, ganja is only grown in the Nimar district, and only for the produce called ganja.

15. Eight or ten poor people join together to buy $\frac{1}{4}$ -seer of bhang. They soak this for about an hour in water, and throw that water away. Then they grind up the moist leaves in about a chittack of black pepper, and mix the paste in about four seers of water, let it stand a little, and then strain and drink the liquid, adding about half a seer of sugar.

Seth Girdhari Lal, Witness No. 77, has described a fancy brew for rich people. The method I have described is the usual one among the poorer classes. The bhang, which I refer to above, that the poor use, is the leaves of the Nimar ganja. We sell it at the same price as ganja (flower). The demand for this preparation is in the season of Holi, and in the hot weather.

The general manner of use is for smoking. For this only the kali (or flower) is used, and all seed picked out and thrown away. A man takes sufficient of this ganja for a chillum (native pipe) in one hand and rubs it with his hand, and, if particular, washes it out once or twice with a drop or two of water, and then makes a ball of it. He

mixes this with tobacco, in the proportion of about three parts ganja to one part of tobacco. Such a pipe is passed on from man to man for a draw. One such pipe is sufficient to stimulate four men.

16. Bhang is only prepared for a drink, and people have to prepare it in their houses; they cannot buy it ready prepared to drink. A party may assemble under a tree and prepare it there.

17. Sunars, Banias and Kayeths are the castes which most generally drink the decoction of bhang; it is their custom in the hot weather. Gossains and Musalmans occasionally drink bhang decoction.

The Gond labouring-class are the most habitual smokers of ganja. Among Gonds, I include Pardhans, for they are just as habitual smokers of ganja as the Gonds proper. All other castes smoke ganja occasionally; about 10 per cent. of the male population are habitual smokers of ganja.

18. Ganja is what I know about. It deteriorates from keeping. It keeps quite good for a year, if no water be allowed to fall on it. If kept in a dry place, raised from the floor, it will keep good for two or three years. It loses its effect after four or five years. Damp is fatal to ganja.

19. Ganja (flowers) are only smoked. Some of the hardened consumers of opium mix ganja in their opium pill, and hardened smokers of madak mix ganja in their pipe, all to make the intoxicating effect stronger. But this is exceptional, by about 5 per cent. of the opium and madak smokers.

20. In this town (Seoni) of about 12,000 inhabitants, there are about 500 who smoke ganja daily. Women, as a rule, do not touch ganja.

Of the 500 consumers, about 100 are youths of 12 years and upwards, about 100 old men, and about 300 men in their prime.

21. I know no ganja now, except the one kind supplied from the Government store at Khandwa.

22. Charas is unknown in Seoni.

23. Bhang is never smoked in this district.

24. There are no habitual smokers of bhang in the Seoni district. There is none available for purchase. I know nothing of any import of foreign bhang. People separate the leaves from the flower of the ganja supplied for sale from the Nimar store, and make a cooling drink from this

* Translation.

† Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

bhang in the hot weather, especially at the season of Holi. The ganja smokers will not take this bhang; I keep what the ganja smokers refuse all the year round, and sell it to those who want bhang in the Holi season.

25. Since the cultivation of ganja was stopped 16 or 17 years ago, there has been a great decrease in the consumption of ganja. Latterly the sale of Government ganja has been increasing, but I consider this is attributable to increased suppression of illicit ganja. Sixteen or seventeen years ago, a pice weight of ganja could be bought for one pice; now it costs one anna; of course this enhancement of price has checked consumption.

26. Of the 500 consumers of ganja in Seoni town, I estimate 300 or 60 per cent. to be habitual smokers, and 200 or 40 per cent. occasional smokers. The excessive consumers are a small minority; say 25 or 5 per cent. of the total are habitual excessive consumers, and 10 or 12, say 2 to 2½ per cent. are occasional excessive consumers.

The consumption of ganja is much more prevalent in the district than in the town. I have shops in the interior of the district, so know. The Gonds, Pardhans, and labouring classes form the bulk of the rural population. I estimate that ¾ of the rural males are most of them habitual consumers of ganja. Out of the 75 per cent. of rural males, I estimate that 70 per cent. are habitual consumers, and only 5 per cent. are occasional consumers. The rural consumers seldom indulge to excess; they are habituated to the drug and have hard outdoor work, and, as a rule, only indulge in moderation. A Gond cultivator will buy 4 annas worth at a time, and use it frugally, so as to last 8 days, each day taking no more than the usual quantum. They renew their supplies at the weekly bazars.

27. The labouring classes and the artisans and the working agriculturists are the chief consumers of ganja. Those who have to work hard in the open air are the people who require and take ganja; it removes their fatigue and fortifies them to resist wet and cold, and even heat.

28. The average consumption of ganja by a labourer, who is a habitual moderate consumer, is one pice worth, or the weight of a 2-anna piece in ganja. This allowance merely sustains and invigorates him; it does not incapacitate him in any way for work, but, on the contrary, makes him work all the better. Sixty per cent. of the consumers only use a pice worth a day, or less. Twenty per cent. consume an average of 1½ pice worth a day. Twenty per cent. consume an average of 2 pice worth a day. This last include well-to-do men, who do not consume all they buy themselves, but treat their neighbours.

It is the exception for ganja smokers to consume more. Some Gossains and even Musalmans and Kayeths consume a tola weight of ganja per diem. This is excessive. About 5 per cent. of the consumers are habitual excessive consumers of this class.

29. Tobacco is the ingredient generally mixed with ganja for a smoke. No one smokes ganja by itself. The general proportion is about 3 parts ganja to 1 part tobacco. A few add 2½ seeds of black dhatura seed with the ganja. Those who wish to increase the intoxicating effect do so; also persons suffering from cough and asthma add dhatura in their ganja to relieve the cough. About 5 per cent. of ganja consumers use dhatura with their ganja, and 2½ seeds is the recognized

addition per pipe. Still fewer add a little opium to the ganja for their smoke; they do so to relieve looseness of bowels and ease a cough. About 1 per cent. of consumers use a little opium with their ganja. Two or four persons in Seoni town add madak to ganja to get a very intoxicating smoke; they call this mixture "bharra." The only motive for this is to enhance the intoxicating effect, and none but seasoned habitués can stand this mixture.

Nothing is sold as "bhang massala" in Seoni.

30. Ganja smoking is a sociable custom. As a general rule, the man who fills a pipe of ganja (with tobacco) for a smoke, passes the pipe round to three or four companions. This is the general custom. Only about 5 per cent. of the consumers will smoke out a pipe by himself.

Ganja smoking is confined mainly to the male sex. Only about 5 per cent. of the consumers are women, and those are only women of loose character. The women-folk of ganja-smoking Gonds do not smoke ganja. It is considered very disreputable in a woman.

Ganja is not smoked with any idea of increasing sexual vigour; the ganja smoker smokes to put himself to sleep, or to refresh himself when fatigued and enable him to work on.

Boys, the sons of smokers, begin to smoke ganja when they go out to work with their fathers or caste-fellows.

Ganja smoking is not special to any age.

31. Ganja smoking has to be acquired gradually. A boy takes about 15 days to learn. The elders begin by giving him only the last draw at the pipe, and he does not take a full whiff at first. The habit of smoking ganja, once it is acquired, is a difficult one to break off. Only about 5 per cent. of the ganja smokers develop into excessive consumers. The bulk remain habitual moderate consumers.

The proportion of people who get ruined from excessive indulgence is much smaller in the case of ganja than of other stimulants. I know because for some 18 years I have been a vendor of opium and madak as well as ganja. The proportions to develop consumption to excess are in my opinion about 5 per cent. for ganja, 10 per cent. for opium, and 50 per cent. for madak. From general observation, I estimate that 10 per cent. of the consumers of liquor (alcohol) take to drinking to excess.

32. I know of no custom, social or religious, involving the consumption of ganja. At the Shivaratri time, Hindus of the ganja-smoking classes offer a little ganja in the Mahadeo temples, but smoking is no part of this custom. Also it is their custom similarly to offer a little ganja at the Chitarai Devis or collections of stones with rags tied to some tree above. They offer either a cock, or a cocoanut, or some ganja. It is a custom among travellers. These Chitarai Devis are in the open, and the travellers have a smoke at the same time. They do not smoke in the Mahadeo temples.

33. Those classes, who do not themselves indulge in ganja, consider the smoking of it to be disreputable. For instance, the Musalman community think it wrong of me even to sell ganja. There are Musalmans who smoke ganja, and these are considered disreputable. Similarly, many Brahmins smoke ganja, but those who do not do so blame those who do. No one is ever turned out of caste for merely beginning to smoke ganja, but Brahmins and Banias

excommunicate any of their caste fellows who take to alcohol, and so do Musalmans. But similar measure is not dealt out to ganja smokers.

I never heard of any worship of the ganja plant.

34. It would be a serious privation to a ganja smoker to forego his smoke. If a man has not money to buy ganja, he will go to a friend or some free-handed smoker and ask for a whiff. Deprivation of such smoking in the case of an habitual smoker throws his digestion quite out of order, causes a swelling of the stomach, and deprives him of appetite. The man gets pains in his arms and legs, and cannot work as before; he soon gets tired. I have seen such cases often when consumers have been out of money; they come begging to me for ganja to get them up to go to work again, saying they have been off work for want of ganja. This is the case with all habitual consumers.

35. The Government could stop the consumption of ganja—nothing is beyond the Government; but it would cause great dissatisfaction. Some would be pleased at the stoppage: 25 per cent. of the adult males would approve the stoppage, but the remaining 75 per cent. would object. Such prohibition would certainly result in illicit cultivation and consumption, but this could be repressed. The well-to-do classes would take to other stimulants, as opium or liquor (alcohol). The prohibition of ganja would cause riots and great discontent among consumers, but there would be no general uprising against Government on account of it.

If Government really wishes to do good, let it repress madak. I say this, though I am a madak contractor, but I see the ruin it causes. Ganja is the poor man's stimulant, and the least harmful of all stimulants. It should not, in my opinion, be prohibited. Alcoholic stimulants require much more to be repressed than ganja. Less general hardship would be involved in suppressing alcohol than in suppressing ganja. Also any prohibition should be prepared for by proclamation for six months or a year, that people might prepare themselves to do without ganja.

36. Alcohol is not at present superseding ganja. The poor cannot afford alcohol. A pice worth of ganja suffices to provide four smokes for a poor man; it would take a bottle of country liquor to yield him equal stimulant, and that would cost 2 annas, or the whole of a poor man's daily wage. Alcohol never could take the place of ganja as the poor man's stimulant.

39. Bhang drinking in moderation is not harmful at all; on the contrary, it is cooling and refreshing in hot weather. Ganja smoking is injurious and may lead to excess, but is not so likely to do so as indulgence in alcohol, opium or madak.

40. Bhang is given to horses and cattle as a tonic, to remove fatigue and give appetite. Animals get into good condition under a tonic course of bhang. The bhang is toasted in a metal pot over a fire, and then either mixed with gur, when the animals eat it readily, or is put down their throats with salt.

41. The moderate consumption of ganja is certainly beneficial to the labouring classes and to those who are exposed to malaria. The labourers can work harder and longer with help of ganja than abstainers from ganja. The staying-powers of ganja under severe exertion are notorious. The Gonds and cultivating classes in malarial tracts and all weathers could

not get on without ganja; it enables them to live under conditions of water-supply and decaying vegetation which would kill others. For those who are habitually exposed to such conditions or to hard labour, moderate habitual ganja smoking is good. To the habitual consumer, ganja smoking is essential to maintenance of a good digestion. It is only for the sedentary classes, and those who have not to work hard in the open air, that ganja smoking is really injurious. Those are the classes who go mad under indulgence in ganja.

42. I do consider ganja smoking good for the poor labouring classes. It enables them to bear hardships they could not otherwise endure, and gives them staying-power they would not otherwise have. I have been a ganja dealer for 17 or 18 years, and I have never known a hard-working out-door labourer or Gond suffer from the habitual moderate indulgence in ganja smoking. It is the sedentary and the idle classes whom it injures.

43. The moderate consumers of ganja are absolutely inoffensive to their neighbours. It is the unaccustomed occasional smokers, and the sedentary classes who cannot stand ganja, who make themselves offensive and troublesome to others.

44. To the habitual smoker of ganja the effect is only refreshing, not intoxicating. To them a smoke of ganja increases appetite. I have known people purposely take a smoke of ganja before sitting down to dinner. It also so refreshes the hungry man, that even, without food, he can continue work or fatigue. The refreshing effect of a ganja smoke on a habitual moderate smoker lasts for about three hours. After that time the habitual becomes limp (*sust*) and longs for another smoke.

45. The habitual moderate indulgence in ganja has no injurious effect on the consumer, either physical, mental or moral, provided he is a man of active habits who has to work hard in the open. It does not impair his constitution, but, on the contrary, enables him to bear up against trying conditions. It keeps his digestion and appetite in good condition. It does not cause either dysentery, brouchitis or asthma to the labouring man; it is, however, apt to cause asthma to the sedentary classes. It does not induce laziness or immoral habits. Neither does habitual moderate indulgence affect any one's reason.

46. Excessive indulgence in ganja does impair the constitution, including the digestion and appetite, and causes asthma and dysentery and inability for labour, and sometimes produces insanity. Those who work off the effects of the ganja with hard labour do not suffer so much. They can stand much more ganja than the sedentary classes. Ganja has no effect in inducing immorality or debauchery; on the contrary, excessive indulgence in ganja incapacitates for such vice.

47. The moderate habitual consumption of ganja does not affect a man's children in any way. I never heard of any hereditary tendency on the part of a ganja smoker's children to take to ganja too. Fathers pass the ganja pipe on to their sons to join with them in a smoke as they get old enough.

48. I have known sons, whose fathers are addicted to excessive indulgence in ganja, to abstain from the drug from disgust at their fathers' excess.

49. Ganja is not used as an aphrodisiac.

50. It is only excessive indulgence in ganja that renders a man impotent.

51. It is the case that budmashes and habitual criminals do smoke ganja to give them increased courage and indurance for commission of crime, and escape afterwards. They smoke ganja for the same reasons in fact that the hard working labourers do—to enable them to bear fatigue and exposure in their calling. The moderate smoking of ganja has no tendency to increase crime.

52. Excessive indulgence in ganja would induce a craving, which might tempt a man to steal to gain the means to satisfy his craving.

Excessive indulgence in ganja does dispose to violence. Only lately my brother's son-in-law under the influence of ganja nearly killed his wife. Gorilal Mull Giladchi is a man of violent temper while under the influence of ganja. Phulsa Aodhia of Bhawanganj became violent from effects of excessive ganja, till he went quite mad and died. For the last two years a man has been wandering about who is violent at times and often quite off his head from the effects of excessive ganja; he has become quite "pagal" now. The Government should take charge of him to prevent his doing violence to others. Another man, a bania from Chauras in this district, is also beginning to be violent and to run at people—the effects of excessive indulgence in ganja. I have heard of four or five persons dying mad from the effects of excessive indulgence in ganja, e.g., Ahmad Khan, my own eldest brother, some twenty years ago; Sher Mahomed of Seoni, about ten years ago, of a respectable Malguzar's family. I cannot recall others.

54. Only habitual ganja smokers could smoke ganja to fortify them before commencing crime; it would disable men not accustomed to smoke ganja. *Vide* answer to Question 51.

55. I have not heard of criminals administering ganja designedly to their victims to stupefy them. If a person unaccustomed to smoke ganja were induced to take even one good whiff his head would swim, and he would immediately become insensible. The effect would pass off in about an hour.

56. Moderate consumers of ganja do not mix anything but tobacco with their ganja. It is only excessive consumers who desire to enhance the intoxicating effect, who add dhatura (2½ seeds is the proportion to a pipe) or opium. See my answer to Question 29. Consumers afflicted with the asthma, which results from indulgence in ganja, use the above admixture of dhatura to alleviate their cough. Persons, unaccustomed to ganja, could not smoke this mixture to relieve ordinary asthma. Similarly, ordinary dysentery patients could not smoke the mixture of opium with ganja—only habitual excessive smokers of ganja suffering from the dysentery thereby caused by the admixture

of ganja. But the dysentery caused by excessive indulgence in ganja is a fatal malady; the discharge of blood is so great that the victim soon dies. This was the case with my brother aforesaid (Answer to No. 53).

57. I know two people who eat ganja. One is Akbar Khan of the Diwan Sahib's family. He is reduced to beggary, and when he cannot get money enough to buy his quantum of opium, he begs or buys a little ganja to mix with his short supply of opium. This man is reduced to a skeleton, though he is only 25 years of age. Somewhat similar is the case of Mussammat Rahmat, a Musalman Bhat. She smokes ganja with her madak. She also is reduced to a skeleton, and can scarcely walk.

58. I have no recommendation to make. The present restrictions on cultivation and sale of ganja are useful, because they necessitate moderation by enhancing the price of the drug.

59. The drug could stand further enhancement of price. Government might raise the wholesale price from Rs. 3 to 4 a seer. The result would be to raise the retail price from Rs. 10 to 12 a seer. This enhancement would not be too severe, and would be beneficial, so far as it goes, in curtailment to consumption.

60. The ganja is not sufficiently cleaned in the Khandwa store. Government should enforce better and stricter selection of the ganja flower, and rejection of leaf and stalk. If the wholesale price were raised to Rs. 4, as I recommend, Government could well afford this. The coarse leaves and stick should be burnt, but the pure leaves would find ready sale as bhang at Rs. 1 per seer—wholesale price.

63. There was no general habit of smoking ganja on premises of the ganja vendor. The prohibition against consumption on vendor's premises was superfluous in the case of ganja. The prohibition, however, is good in principle.

69. There is no feeling against location of the ganja shop or stall in a public place. The majority smoke ganja, and there never has been consumption on the vendor's premises, and there is no gathering of bad characters about the ganja shop. There are orders to entertain objections, if preferred, but I never heard objections made. In native opinion there is no ground for objection. On the contrary, the more central the ganja shop, the greater is the public convenience.

70. There is no general use of untaxed ganja in this district. The Native States are too far off for successful smuggling. No one imports foreign bhang. It is not available for sale in this district, nor is there any demand for it.

80. *Evidence of COWASJEE MEHERWANJEE HATTY-DAROO, Parsi, Merchant and Abkari Contractor, Seoni-Chapara.*

1. Since my taking the contract of country liquors in this district, for the sake of information and curiosity, I have collected amongst other subjects that of ganja and bhang, and on receipt of your enquiry, more information was gathered.

2. It is a fact that the three narcotic articles obtained from hemp plant, but the bhang and ganja plants are different from each other, and are grown from different seeds. The ganja seeds

are much larger than the bhang seeds. Bhang seeds are very valuable as food for singing birds, as canaries, etc., whereas ganja seeds are never used for the purpose.

The liquid preparation of dry bhang leaves is called subji as well as bhang; also from the bhang leaves majum is prepared.

Flat ganja is generally called "kali," round "bhutai," and the fallen off leaves, chur.

3. In the principal town of Gonda, Bahraich in North-Western Provinces, bhang and ganja plants grow spontaneously.

4. The plants are respectively known as bhang and ganja plants.

5. The wild plants of bhang and ganja and common "pathar" (hemp plant) of this province can be grown in any land. It is a common saying that the plant is most shameless, as it will grow in any land without any care, but the suitable land for the best ganja plant called "baluchar" is in Lower Bengal.

6. Scattered, like weeds, such as "chakutra," etc.

7. Yes, (a) for production of ganja in Nimar district only, where the area of 940 acres 1 rood were under cultivation during the year 1892-93; (b) foreign importation; (c) also foreign importation.

In this province the leaves, which are collected from the male, or fallen off leaves of the female plants, and sold by the vendors as bhang, is not genuine bhang, and is not used as such by the well-to-do or even middle class, excepting the very poor people who occasionally use it as a spurious article.

8. Statement of ganja cultivation in Central Provinces, from 1882-83 to 1892-93.

YEARS.	CULTIVATION IN NAGPUR.					CULTIVATION IN NIMAR.					Total area under cultivation in Central Provinces.			Total quantity received in central stores, Central Provinces.				
	Area under cultivation.			Quantity received in central stores.		Area under cultivation.			Quantity received in central stores.									
	A.	R.	P.	M.	S.	C.	A.	R.	P.	M.	S.	C.	A.	R.	P.	M.	S.	C.
1882-83	93	0	8	632	8	0	832	0	0	3,388	34	4	925	0	8	4,021	2	4
1883-84	91	1	28	457	34	10	1,053	0	0	5,898	24	0	1,144	1	28	6,356	18	10
1884-85	328	0	0	966	34	0	2,553	0	0	8,483	27	0	2,881	0	0	9,450	21	0
1885-86	543	1	8	2,292	26	0	3,627	0	21	16,679	5	0	4,170	1	29	18,971	31	0
1886-87	98	2	0	834	14	0	833	0	0	8,455	33	0	931	2	0	9,290	7	0
1887-88	38	3	28	625	31	0	485	3	32	4,124	28	0	524	3	20	4,750	19	0
1888-89	79	10	33	377	0	0	858	2	32	9,449	30	0	940	1	25	9,826	30	0
1889-90	38	3	18	311	36	0	954	0	0	10,854	15	0	992	3	18	11,166	11	0
1890-91	...	...	...	...	...	...	520	3	0	7,224	6	0	520	3	0	7,224	6	0
1891-92	...	...	...	...	...	...	653	3	0	6,684	33	0	653	3	0	6,684	33	0
1892-93	...	...	...	...	...	...	940	1	0	6,685	33	0	940	1	0	6,685	33	0

9. I have no personal knowledge of cultivation of these plants, but very interesting account is given in the Dictionary of the Economic Products of India, pages 103 to 126, Volume II.

10. No, they are the same as the other agricultural cultivators.

11. Yes.

13. The cultivation of hemp plant for ganja is now restricted in Nimar district only. Formerly it was cultivated in other districts, the last cultivation was prohibited by the authority in Nagpur district during the year 1889-90. Regarding its growth, please see Answer No. 5.

14. (a) from ganja plant prepared no articles. From (c) bhang, majum is prepared. In Nagpur Nimar, Hoshangabad, Narsinghpur, Jabalpur, Damoh and Saugor districts of this province majum is prepared, and following numbers of licenses for retail sale of this preparation were granted and license fees received during the years 1882-83 to 1892-93.

YEARS.	Number of licenses for retail sale of majum in Central Provinces.	License fees received on majum in Central Provinces.		
		Rs.	a.	p.
1882-83	17	632	1	4
1883-84	20	632	8	0
1884-85	19	804	8	0
1885-86	21	1,152	8	0
1886-87	21	1,500	0	0
1887-88	21	1,095	14	0
1888-89	22	951	0	0
1889-90	23	976	0	0
1890-91	24	836	8	0
1891-92	25	782	12	0
1892-93	36	1,075	4	0

16. Bhang (subji) is generally prepared by the people in their own houses, but it is also sold prepared ready by Brahmin vendors in Bombay, Allahabad, Cawnpur, Mathura, Benares and many other large towns in India. Yes, bhang

can be prepared from any bhang plant, whether of wild or country. Products from the wild hemp plants, either of ganja or bhang, will not be so effective and flavoury as properly cultivated one.

17. Bhang (subji) and majum when sold in bazars is prepared by Brahmins only. There is no restriction to ganja; the chillum of ganja can be prepared by any smoking class of people.

18. Ganja and bhang will keep good for ten years if properly protected from moisture and packed in wooden boxes and earthen chatties. New ganja and old bhang are always appreciated by the consuming class.

19. Ganja is used only for smoking by almost all the habitual and occasional moderate consumers, and the smoke inhaled deeply and retained by the habitual excessive consumers.

20. More than 50 per cent. of male members of almost all (excepting Christians, Parsis and high caste Muhammadans and Brahmins) in the villages resort to ganja, but not so extensively used in the towns. Generally they commence at the age of 12 to 15; and, as a rule, females do not use it.

21. Flat ganja (kali) is preferable to chur. Round ganja is not obtainable here. But baluchur of Lower Bengal is the best quality, and is consequently much dearer than the pathar of this province.

22. Charas is a foreign product, and generally brought by Kabulis and Punjabi dealers.

23. Bhang is not used for smoking.

24. (a) Bhang leaves are also eaten along with jaggery by habitual drinkers while travelling and when it is inconvenient to make subji on the road.

(b) Most of the wealthy and middle class of the Hindu community (Brahmins included) drink bhang.

25. The use of bhang as well as ganja is in increase in this province.

Statement of ganja sold through wholesale vendors to retail vendors and amount realised in Seoni District, and total sale of bhang and ganja in Central Provinces from year 1882-83 to 1892-93.

YEARS.	GANJA SOLD IN SEONI.		BHANG SOLD IN CENTRAL PROVINCES.		Ganja sold in whole Central Provinces.	Total amount received for the sale of ganja, bhang, majum, etc., in the whole Central Provinces.
	Ganja sold in Seoni district only.	Amount received in Seoni district.	Bhang sold in whole Central Provinces.	Amount received for bhang in whole Central Provinces.		
	M. S. C.	R. a. p.	M. S. C.	R. a. p.	Maunds.	R.
1882-83	50 22 6	9,176 15 0	10 31 7	851 7 9	610	1,11,095
1883-84	63 6 15	9,978 7 8	9 29 0	769 10 0	757	1,29,207
1884-85	74 32 12	12,872 12 6	11 20 14	924 14 6	845	1,62,340
1885-86	65 34 9	14,752 1 4	9 13 8	747 1 0	1,005	1,92,679
1886-87	57 5 12	14,079 14 6	10 30 0	860 1 0	863	2,12,691
1887-88	64 33 8	14,485 10 6	10 19 2	838 10 0	831	1,90,528
1888-89	67 12 4	16,412 10 6	12 6 7	973 0 3	941	2,00,168
1889-90	68 12 8	16,344 11 0	10 18 5	837 10 6	971	2,02,429
1890-91	68 6 0	17,078 10 0	10 14 15	829 14 0	1,019	2,12,580
1891-92	82 39 11	19,027 3 6	12 9 1	976 14 0	1,156	2,29,251
1892-93	79 17 14	19,793 11 0	13 22 12	1,035 13 9	1,194	2,54,931

26 *Ganja*—(a) Habitual moderate consumers of ganja, 80 per cent.,

(b) Habitual excessive consumers, 10 per cent.,

(c) Occasional moderate consumers, 4 to 6 per cent., and

(d) Two to 4 occasional excessive consumers.

Bhang—In villages very little bhang is used, but in towns out of 100 consumers—

(a) 90 per cent. habitual moderate consumers.

(b) 5 per cent. habitual excessive consumers.

(c) 3 per cent. occasional moderate consumers.

(d) 2 per cent. occasional excessive consumers of bhang.

27. *Ganja* inhaled by almost all Bairagis, Gosains, jogis, pardesis, and some of the badmashes, as habitual excessive consumers, and habitual moderate consumers are mostly labouring class of people of Hindu, Gond, and Muhammadan community.

28. (a) To a habitual moderate consumer of ganja, the cost will be from 3 pies to 9 pies per diem; and to a (b) habitual excessive consumer from 2 annas 6 pies to 3 annas 6 pies per diem. (For an excessive consumer 2 tolas in weight of ganja will be required.)

(NOTE.—As a rule, a well-to-do habitual moderate or excessive smoker of ganja will not enjoy himself well unless three or four men are joined with him. A chillum full of ganja is not consumed unless four men smoke it).

Bhang: (a) and (b)—To a habitual moderate or excessive consumer of bhang, the cost will be from 1 anna to 4 annas per diem.

29. *Ganja*.—The ingredients mixed (a) ordinarily—one part tobacco to two parts of ganja with a little ghuraku added; (b) panch-rangi chillum of ganja, which is of superior sort, is prepared in addition to the above given mixture (a); kesar (saffron), jaifal (nutmeg), lawang (cloves), elaichi (cardamom), kasturi (musk), with a little otto of rose or kewra. For this purpose, the ordinary earthen chillum (pipe) would not answer; it is cut out of a piece of sugarcane; the fire also is obtained by burning coir-rope, or dry dung of sheep, goat or horse. The object of this special mixture is to make the pipe give a rich flavour and more intoxication, and is only resorted to by the wealthy.

Dhatura (2½ seeds) is only used by habitual excessive consumers for more intoxication. Regarding bhang massala, ordinary bhang massala is

made of one tola bhang 3 pies purchase, kallimirch (black-pepper), sonf (fennel) and kashni, one pie worth each: to be well powdered and mixed in one seer of water.

A special massala mixed by the wealthy people for bhang for a company consisting of 12 to 16 persons, and is called ganga-jamni, panch-rangi, and dudhia-sarbat; and the following ingredients are used in preparing the same:—2 chittacks bhang, 2 seers sugar, 4 seers milk, 1 chittack badam (almond), ½ tola elaichi (cardamom), ¼ tola kaisar (saffron), 1 quart bottle either of rose, anar or kewra syrup, 1 chittack kallimirch (black-pepper), 2 tolas sonf (fennel), 1 tola kashni, 1 tola talam khureke-bij, 1 tola kakrike-bij (cucumber seed), 1 tola kharbujke-bij (melon seed), 1 tola dhania (coriander seed), 2 tolas pishta, (pistachio), 2 tolas kismis, 4 khaira flowers, 6 dry rose flowers, 4 kasheru and 2½ seeds of dhatura.

30. To the greatest extent ganja and bhang are used in company. Ganja is generally consumed by the male, and in few cases by the women of bad repute. Bhang is also generally consumed by male and by well-to-do ladies on special occasions and in company, and sometimes children are allowed to partake the same.

31. Yes, the habit is easily formed, as the smokers enjoy the chillum (pipe) more in company, and the novice gets it free of cost to begin with. Not only this ganja is smoked as medicine for several diseases, it is also used for the sake of increasing licentiousness. The habit, if well formed, is difficult to break. The habit from moderation to excessive smoking generally increases amongst labouring classes.

32. According to Hindu rites, they celebrate the Shivaratri holiday by offering the god Mahadeo richly prepared bhang, ganja and dhatura flowers, as the god Mahadeo or Shiva is supposed to be very fond of these drugs, and the best way to please the god is the offering of these drugs. The drug after being offered to the god, is distributed amongst the people gathered, who are the consumers either of bhang or ganja. The bhang is resorted to freely even by those who are non-consumers. Almost 90 per cent. of Hindus may be indulging in bhang occasionally, though a very small percentage might be taken as habitual consumers. Another deity to whom these drugs are offered is Hardulal.

In the funeral ceremony amongst the Gonds of these provinces, flat ganja (kali) is placed over the chest of the dead body of the Gond; and when the funeral party returns home, a little of the

ganja is burnt in the house of the dead person, the smoke of which is supposed to reach the spirit of the dead.

In the first instance the followers of the god Shiva are bound to give the offering, and is therefore an essential ceremony. As for the Gonds, the funeral ceremony described above is followed invariably.

In Shivaratri holiday, bhang is used to a great extent compared to ganja, and the consumption is temperate only except in rare cases ; and these occasional indulgences could not be supposed to form into any habit or prove injurious.

33. Upon a social point of view, amongst the Hindus of middle and higher classes, a ganja consumer would be looked down somewhat, but a bhang consumer will not in the least lose his prestige, whereas, amongst the Muhammadans, the consumer of anything intoxicating, being a high sin, the consumer of any of these drugs amongst them would be looked down very badly. Amongst the high caste, or orthodox Hindus, a ganja or bhang consumer would not be looked upon on a religious point of view, but if the consumer takes liquor then he is at once outcasted.

Hemp plant is not actually worshipped by the Hindus, but in the Veda it is reckoned with soma plant as one of the five plants "which were liberators of sin," viz., pimpal, bar tree, odumbar tree, palas tree, and soma. The witness thinks that, properly speaking, the real soma plant is our bhang plant, but to keep this secret from the public, fabulous description of the soma plant of Vedas and homa plant of Zend is given, though the effects of these three (soma, homa, and bhang plant) are the same when prepared in a peculiar manner.

34. Yes, it will be serious privation to the labouring class of habitual moderate and excessive consumers of ganja and bhang, as they will not be able to work and support their families and could not get some cheaper drugs to satisfy their longings.

35. It is not advisable to prohibit the use of ganja or bhang. It is the only narcotic stimulants for middle and poor classes. It will occasion serious discontent among the consumers, and in the Native States, where the cultivation is grown. The prohibition will be followed by recourse to dhatura seed, somal, wachhnag, and kuchla only. The result will be something like the Government introducing more idiotcy all over, as the mass of people will not be able to pay for dearer alcoholic stimulants, and in what repute the liquor is held, I have already expressed the native opinion in No. 33.

36. It is quite the reverse. According to my experience as an Abkari Contractor, people are leaving off the habit of drinking liquors day by day, and are resorting to ganja instead, as this drug is much cheaper than the country spirit. The following statement will prove the same :—

YEARS.	Country spirit issued from Sadar, District Secoi.	Amount of ganja sold by wholesale vendor to retail vendor in Secoi District.
	Gallons.	M. s. c.
1888-89 . . .	18,480	67 12 4
1889-90 . . .	18,525	68 12 8
1890-91 . . .	14,580	68 6 0
1891-92 . . .	17,107	82 39 11
1892-93 . . .	13,761	79 17 14

37. The effect of smoking charas is greater than that of ganja, and more intoxicating, though the effects of both drugs, charas and ganja, are instantaneous.

38. The effect of baluchur, as regards to flavour and intoxication, is the best ; and next to this pathar of Nimar side. The chur is of no use, as even the poor will not willingly buy the same.

39. Bhang drinking and majum eating are less injurious than the gauja smoking. Ganja will immediately affect the brain, while bhang will take time to get the required effect. The appropriate names are given by Hindu sages. Bhang is called "the joyous," "delight giver," "the intoxicator," and ganja is called "the noisy."

40. Regarding the medicinal quality of bhang and ganja, most valuable information can be obtained from the Dictionary of the Economic Products of India, Volume II, page 121. Bhang leaves along with jaggery is generally given to fatigued bullocks.

41. Moderate use of ganja ($\frac{1}{2}$ of a tola in weight) one chillum before each dinner and supper, and the same weight of bhang to be taken every afternoon will have most beneficial effects in respect to (a), (b) and (c). Ganja (d) in curing dysentery. There is also reason to believe that the gauja consumers are not attacked by the pile disease.

Almost all the consumers of these drugs are induced to use them for one or other of the above-mentioned purposes (a), (b), (c) and (d), first in moderate quantity, which gradually increases to excess and becomes most harmful and loses all its medicinal quality.

42. Please see Answer to No. 41.

43. Not only the moderate consumers, but the habitual excessive consumers of ganja and bhang, are inoffensive to their neighbours.

44. The immediate effect and great peculiarity of both of these drugs upon a moderate consumer is that his mind is actively concentrated to a single subject only, and the subject invariably is the same to which the consumer in his rational state would be bent upon, be it religion, crime or anything else. It is very refreshing. Produces intoxication ; it never allays hunger, on the contrary it produces a very good appetite upon a novice ; the effect will last from 10 to 12 hours, and, upon an ordinary consumer, for an hour only, but the after-effects are very desponding upon a novice. The after-effect of ganja will also produce headache. The longing or uneasiness for a subsequent gratification upon a novice will depend upon his being associated with ordinary consumers ; if in their company, he will have a longing, otherwise not. The witness once had occasion to take bhang and quite agrees with the remarks of Mirza Abdul Razzak quoted in the Dictionary of Economic Products of India, Volume II, page 123 : "It produces a ravenous appetite * * * * excites wild imagining, a sensation of ascending, with forgetfulness of all that happens during its use, and such mental exaltation, that the beholder attributes it to supernatural inspiration."

45. The habitual moderate use (i.e., $\frac{1}{2}$ of a tola per diem) will not produce any noxious effects, physical or mental, as long as the consumer gets his regular nourishment, but, whenever he is not able to get the same nourishment, he will have some bad physical effect, but not mental. It will not affect his morals in any way at all. Under this circumstance, it will not impair the

constitution, nor injure digestion or cause loss of appetite, nor produce dysentery or bronchitis or asthma, nor impair moral sense or induce laziness or immoral habits, much less debauchery, neither it deadens the intellect or produces insanity.

46. Habitual excessive use of ganja will bring all the miseries enumerated in the Question No. 45, the unfortunate being a curse to his own existence, and there is strong presumption to believe the fact that medicine loses its efficacy during any serious illness of the consumer.

49. Yes, moderate use of ganja or bhang will tend to produce aphrodisiacal effects. In rare cases ganja is smoked by prostitutes. The excessive use of bhang and ganja will tend to produce impotence.

50. The excessive use of ganja and bhang will destroy all the aphrodisiacal desires. Yes, excessive use of ganja and bhang will bring on impotency.

51. Among bad characters, 40 to 50 per cent. might be taken as habitual moderate consumers, and as the moderate use of ganja and bhang has the power to concentrate the thought, according to our own mood; and the explanation given in Answer No. 41, will tend to prove the connection between crime and the moderate use of ganja and bhang.

52. The excessive use of ganja destroys all activity, and the consumers have no opportunity to do anything, good or bad.

53. No, the excessive use of ganja and bhang incapacitates the consumers, and does not cause homicidal frenzy.

54. Bhang and ganja will seldom be used by criminals as a means to fortify their courage.

55. There are certain classes of criminals who induce their victims to smoke ganja in order to rob them. If the victim is a non-consumer, the effect of an ordinary ganja chillum will completely

stupefy him, and he will be at the mercy of his oppressor, but if the victim is a moderate or excessive consumer of ganja, then 2½ seeds of dhatura mixed in the chillum will completely stupefy him. Bhang is not generally resorted to for this purpose, neither it stupefies completely without admixture of dhatura seeds. Please see Answer No. 39, regarding the effects of bhang.

56. The use of ganja and bhang, in addition to other admixture, is described in my Answers to Nos. 29 and 55. The admixture of dhatura for personal consumption is to obtain more intoxication; while administered to others, it is chiefly done for the purpose of stupefaction.

58. As far my opinion goes, I think the Government system of farming the ganja sale of wholesale and retail, though it increases the revenue annually, has now come to its zenith, and the time is not distant when the revenue will go down.

Each year, at the time of selling the monopoly, a new contractor comes to the front and retires after his contract is completed, drawing a new person after him. If the old contractor had any profits, he would not have allowed the new man to take up his business for the sake of few extra rupees.

Properly speaking the Government actually receive Rs. 6-0-7 on every seer of ganja sold to the poor retail vendor in Seoni district, or Rs. 5-5-5 on every seer of ganja and its products sold all over the Central Provinces during the year 1892-93 before it went in the hands of retail vendors of the province.

68. There are no shops where the preparation of bhang is consumed on the premises, and it is my opinion that such houses should not be encouraged.

69. Properly speaking people, even in large towns, have no interest in the matter, and are quite careless where you open a shop.

81. Evidence of BIRAJ, Marwari, Wholesale ganja vendor, Kamptee, Nagpur District.

1. I have been wholesale ganja vendor for many districts in the Central Provinces for the last 15 years.

2. These definitions may be accepted for the Central Provinces. The names given are locally applicable. Bhang is also known as "thandai."

3. I don't know of any such districts.

5. I don't know about this.

6. No knowledge.

7. Cultivation of the hemp plant is permitted in the Khandwa Tahsil of the Nimar district for purposes (a), and (d) seeds.

8. None to my knowledge; only ordinary fluctuations.

9. No knowledge.

10. No; they are of same class as other agriculturists.

11 and 12, No.

13. Yes. Nimar district. Because ganja has been always grown there, and because the average rainfall is very small, which is favourable for such cultivation. Such cultivation would be impossible in the rice districts, e.g., Chhatisgarh and wherever there is much rainfall.

14. Only (a) ganja. In the Nimar district. Upwards of 5,000 maunds yearly.

15. The cultivated plant is pressed under foot, useless leaves fall off, and the remaining ganja is then used for smoking. Local preparations are not used for eating or drinking.

16. (a) to (c) No.

17. The only preparation in these provinces is ganja, as before stated. It is prepared by ordinary agriculturists.

18. I don't know about charas. Ganja and bhang quite lose their effect after 2 years. The resinous properties dry up. No special measures are possible to prevent deterioration.

19. Ganja is generally used for smoking, but a preparation called majum is also made therefrom, and eaten chiefly in the larger towns.

20. Labouring classes generally; Hindu mendicants of all sorts; Muhammadan fakirs; a small proportion of the agricultural class; also a few of the middle and upper classes. Charas is not used. No particular locality.

21. Flat, such as is produced in Nimar.

22. None is used.

23. No.

24. It is seldom eaten except in travelling. Marwaris, Brahmans, Khattris, Pardesis of all classes, drink bhang. Of these castes about 75 per cent. drink it.

25. The use of bhang is much the same as formerly; but the use of ganja appears to be on the increase, because less smuggled ganja from Feudatory States, etc., is obtained. Thus the increased consumption of ganja too is more apparent than real.

26. Almost all the labouring classes and agriculturists are habitual moderate consumers of ganja. Almost all mendicants and fakirs are habitual excessive consumers. Most of the middle and upper classes come under (c). Consumers of bhang are confined chiefly to the upper middle class, under (a) only.

27. The classes are explained above in 26. The practice is induced by the fact of its being a stimulant to exertion, and counteracting fatigue like alcohol.

28. (a) From 6 pies to 1 anna.

(b) About 4 annas.

29. Ordinarily tobacco. Exceptionally dhatura, to make it very strong.

Yes; black pepper, almonds, cardamoms, rose leaves dried, cucumber seeds, aniseed, sugar, milk.

30. The labouring and upper middle classes generally smoke in solitude. The mendicant classes in company. It is mainly confined to the male sex: not to any particular time of life. Children occasionally drink bhang. Prostitutes frequently smoke ganja: those who don't sing.

31. (a) It is easily formed.

(b) Difficult to break off.

(c) No.

32. The names of several deities are invoked before consuming ganja or bhang. At the Shivaratri festival, the god Shiva is bathed with bhang; this is considered essential. It is generally temperate, adopted only by those who have already formed the habit. Not particularly injurious.

33. The total abstainers regard it as a vice, others don't. The opinion of the former is based on the fact of its being an intoxicant to some extent. Charas is looked down upon, but its use is not prevalent in these provinces. No custom exists of worshipping the hemp plant.

34. Most certainly, to all habitual consumers. They would rather forego food. [I can't answer the other part of the question.]

35. (a) No.

(b) Yes.

(c) Not at all.

(d) Yes.

(e) Yes.

(f) Yes, by those who can afford it, and are not prejudiced by caste.

36. No.

37. The effects of the former are more active and last longer.

38. Only the flat kind is consumed in these provinces.

39. Smoking is less injurious, the effect passing off more rapidly.

40. No knowledge.

41. (a) Yes.

(b) and (c) Yes.

All classes of consumers. I refer to the moderate habitual use.

42. Beneficial as described in Answer 41.

43. Yes.

44. (a) to (e) All these effects are produced.

(f) The effect lasts for an hour or two.

(g) No after-effects.

(h) Yes.

45. (a) to (e) No.

(f) No. I don't know whether insanes confess to the use of the drug.

(g) No knowledge.

46. The habitual excessive consumer sometimes becomes emaciated, with a tendency to chest complaints; but I do not think that any mental or moral injury results.

47. No.

48. Not hereditary in this case either.

49. (a) No.

(b) Yes.

(c) No knowledge.

(d) No.

50. Excessive use of charas might produce impotence.

51. (a) No.

(b) None.

52. Unless dhatura is mixed with the drug, I don't think it would act as an incentive to crime.

53. Only as above. No.

54. I am not aware of such use.

55. (a) Not to my knowledge.

(b) No.

56. The admixture of dhatura in any way is liable to produce excitement akin to madness.

57. I have not sufficient knowledge to reply to this.

58. It works well. I cannot suggest any improvement.

60. No modification required.

63. No objection.

64. No.

65. Taxation reasonable.

66. No, only one kind here.

67. No.

68. No special prohibition exists against this. The prohibition is sound.

69. The wishes and requirements are considered by the District Officer, as they ought to be.

70. No; there is very little smuggling. As a rule duty is paid on ganja and other hemp drugs used.

82. *Evidence of LALA RAMSAHI AND LALA SITARAM, Abkari Contractors, Nagpur.*

19. Charas is used only in smoking, and ganja is used in smoking as well as in eating and drinking, but turning it into different form, such as bhang and majum, in almost all places.

20. Charas is used much in Northern India, while ganja only is used in Central Provinces and nearly $\frac{1}{4}$ th of the population is addicted to it. Sages, people of low caste, and labourers generally use it (ganja) in the Central Provinces.

21. Chur ganja is more intoxicating, and therefore it is liked much for smoking, but it not being available in Central Provinces, flat ganja, which is produced here, is used in its place. Chur ganja is used in Northern India. Round ganja is considered to be inferior, and therefore not used.

22. Native charas is used generally. In the Central Provinces it is not used at all.

23. Bhang is not used in smoking.

24. Bhang is generally used in the whole of India, but it is used much in Marwar and Northern India. Nearly half of the population must have been using it in drinking only. In eating it is rarely used. All classes of people drink it, but Marwaris and Hindustani Brahmins use it much in drinking.

25. Day by day all these drugs are used much, because a man is intoxicated in a very little expense.

26. Ganja is used by—(a) $\frac{1}{2}$ th of the population, (b) $\frac{1}{4}$ th of the population, (c) $\frac{1}{8}$ th of the population, (d) $\frac{1}{16}$ th of the population.

27. People of low castes and labourers are inclined to use ganja, under the impression that its intoxication relieves them from the exhaustion. Sages use it under the impression that their mind is directed steadily for a long time towards God. And some debauchees use it for the sake of luxury.

28. (a) In one tola,—that is, in two annas.

(b) In ten tolas,—that is, in Rs. 1-4-0.

29. In ganja :—

(a) Tobacco is ordinarily mixed.

(b) Sages mix dhatura for intoxication.

30. In company gauja, bhang or charas can be used double the amount of what is used in solitude. These are confined to male sex only. Children use them rarely.

31. The habit of using them can be easily formed. It is not difficult to break off. There is a tendency of developing the moderate habit into the excessive.

32. There is neither social nor religious custom in which any of these three are used.

33. The consumption of each of these is regarded

as a very bad habit. There is no custom of worshipping the hemp plant.

37. Intoxication of charas is of long stay, and stronger than that of ganja; besides it is more injurious to health also.

39. The use of the preparation is less injurious than the use of ganja in its original shape.

40. Ganja and bhang are used in medicine. They are used in the treatment of cattle disease also.

41. (a) Yes, if moderately used. Still it proves more injurious than efficacious.

(b) Yes.

(c) No.

42. The moderate use is harmless, because moderate use is not injurious to health.

43. Yes.

44. It is refreshing with a little intoxication, which lasts for an hour or so.

58. I am acquainted with the present system of excise administration in the Central Provinces, and I do not consider it to be capable of any improvement.

60. Ganja is produced in Nimar district only, and the preparation is sufficiently controlled.

61. Charas is not produced in Central Provinces.

62. It is not produced in Central Provinces.

63. I have no objection, and I think the present system is exactly as it ought to be.

64. I see no objection.

65. (a) In my opinion the taxation is reasonable in respect to each other.

(b) In this respect, in my opinion, I think these drugs should not be double taxed, that is, by license fees and duty, because these drugs are given at a certain fixed rate to the contractor, and if he is ordered to sell dear, then there is only probability that people will not use them so much owing to their being dear. And the system of the Central Provinces should be enforced in the whole of India.

66. I don't see it necessary that there should be different rates of taxation for different kinds of ganja.

67. Yes; it should be heavily taxed, so that people should not get it cheap.

68. There are only shops for the sale of ganja and bhang.

69. Yes; public opinion is generally taken for the inconvenience, if they are put to.

83. *Evidence of BABU MUNA LALL, Ex-Contractor of Ganja, Jabalpur.*

1. I held the ganja contract for the Jabalpur district from 1879 to 1887, and I have also held from time to time large labour contracts.

20. I estimate that 50 per cent. of my coolies use gauja. Amongst respectable persons perhaps 2 per cent. smoke the drug. Coolies use it because they work better on it, and fakirs use it extensively because they can stave off hunger by its use.

45. I think the habit of smoking ganja, even in

small quantities, is injurious. About one person in four who smokes, suffers from the disease called *damma* (asthma?).

24. Bhang is little drunk in these parts, because it is cold in comparison with Delhi, Lucknow and Meerut. In 1879 I sent for 25 maunds of bhang, and I did not sell it off for three years.

25. My experience is that less ganja is being used now-a-days in consequence of its higher price. The retail dealer gets his ganja at Rs. 3 a seer and

he nominally sells at an average of Rs. 10 a seer, but he cheats his customers as far as he can in the weights and gets Rs. 12 a seer.

45. Fifteen days ago I saw a man, Naga Baba, smoke himself alone in two hours a pound of ganja. At the end of it he was quite in his senses and could sit upright and speak, and he ate food that evening.

33. Strong disapprobation is felt in respectable circles against the habit of ganja smoking, because ganja is generally smoked by low and disreputable persons.

35. I think it will be impossible to stop ganja

altogether. It would always be smuggled in from somewhere. In my contract, I remember, when the price of ganja went up, the Madras Regiment stationed here smuggled ganja from Bellary in boxes of dried fish. Again, if we raised our duty, we should have ganja smuggled in from such States as Panna and Maihar. The price of ganja there now is from 8 annas to Re. 1, but I believe the smuggling from there is very small.

45. I think that the ganja habit is more injurious than the opium or the country liquor habit. Ganja intoxication is instantaneous in most cases, not gradual like that induced by other drugs.

84. *Evidence of SHEW NARAIN, Bajpai Brahmin, Public Works Contractor, Jabalpur.*

41. I think the habit of ganja smoking to be beneficial to the poor labouring classes, but injurious to the well-to-do. The former cannot afford to buy much, and they work off the effects, so that they derive no harm from it. The latter suffer in health; they get a persistent cough, and their blood dries up (*sic*).

33. A respectable man will incur social odium if he takes ganja in public with regular ganja smokers, but not if he takes a little in the privacy of his own house.

53. I have never had any experience of any person having lost his reason or committed any crime of violence in consequence of over-indulgence in ganja.

25. I cannot give any opinion whether the consumption of ganja here is on the increase or no.

65. I am opposed to any increase in the duty, because I believe that people who have formed the habit will obtain the drug somehow, by smuggling if they cannot get it otherwise.

35. I should deprecate the total abolition of ganja. Many working people would be wholly unable to work without it: neither opium nor country liquor would satisfy their cravings.

32. Bhang is drunk by all Hindus at several religious festivals, such as the Ram Lila. Ganja is not smoked in connection with any religious festival or family ceremony, as far as I have ever heard.



EVIDENCE OF MADRAS WITNESSES.

1. Evidence of THE HONOURABLE MR. C. S. CROLE, *Member, Board of Revenue.*

Oral evidence.

I am a Member of the Board of Revenue, and have been over thirty years in the Civil Service. I have been in connection from September 1889 up to December last with the excise as Commissioner of Excise, having at the same time a number of other subjects under my charge. I can give no information regarding the extent of the use of the drugs apart from the returns of auction sales. But these are not reliable. They understated the extent of use notwithstanding the large increase that took place two years ago, inasmuch as any one may, under existing law, have plants in his back-yard in certain districts where the custom of the inhabitants or climate has led to this. I do not think that hemp would grow to profit in the low-lying hot districts of the east coast. The extreme south, the Wynad, the Javari Hills in North Arcot, practically the whole of the Kistna district, and the agency tracts in the hill tracts, from five hundred to three thousand feet above the sea, are the places where it seems to be generally grown. Of course I am only speaking from general knowledge, as it was determined not to introduce any crucial restrictions.

I have no reason to suppose that consumption is on the increase; but I should think that the probabilities are that it is on the decrease, because under the regulations a healthy liquor is available in toddy; and distilled liquor and probably drugs also have suffered. Toddy has been driving out distilled liquor, I find, and as I have no ground to suspect increase in drugs, I fancy the same operation is going on there. The toddy traffic has been placed under strict regulation. A better liquor is provided; and there is no possibility now of forcing the sale of distilled liquor against fermented liquor. This seems to me a great benefit, like the substitution of a light gravity beer for Hennessy's brandy.

I can tell nothing of the effects of the drugs on the health of the people. The subject in this Presidency is quite immaterial. My impression is that there is a widely diffused consumption of hemp on a very small scale. I have seen no effects. I have no reason to believe that it has had any effects on the health of the people. It has never been mentioned to me in this connection. I have heard that insanity is attributed to hemp. I have read this in the papers for many years. But I have never come across a case. This is due, no doubt, to the peculiarly limited consumption in this presidency, and I know that the reports as to the cause of insanity have to be taken with a considerable grain of salt. In regard to alcohol as contained in distilled liquor, I can say I have seen very bad effects on health among the degraded portion of the community. In "degraded" I include not only the lowest of the people, but others also. I have seen cases of very bad effects. No such case has ever been brought to my notice in connection with hemp.

The connection of hemp drugs with crime has never been brought to my notice, though up to 1889 I had had charge of six or seven districts and served in others. Since then I have had opportunities of travelling over all districts of the presidency. I have also been Salt Commissioner in Orissa (Bengal).

I see no need for prohibition, possibility apart. Nor have I seen any necessity for further restriction at all. For the auction system will always tend to keep prices up and check excessive consumption. Financial considerations apart, I see no necessity for further restriction. What I know of the extent of the use of the drug and of its effects leads me to say that there is no such necessity.

My own opinion is, and my advice has always been, that so long as there was no abuse there should be as little interference as possible. I cannot speak for Government. That is my personal view. The best plan of ascertaining whether there is any abuse is to have a proper system or *regime* that we may know the facts as far as possible, and be able to judge of what necessity there may be for interference. This policy has been pursued since 1889. I do not think that, the drug being an intoxicant, it is necessary for Government to make such restrictions as may prevent excess. I think temperance good, but liberty better. No doubt the auction system puts a drag on consumption. Of course, on the other hand, if I found that scores and hundreds of people were going wrong through it, I should be inclined to interfere at once. The question was raised last year in connection with some reference regarding smuggling into the Central Provinces. We had no evidence of this, and Sir Antony MacDonnell did not prove it. Nor did we see any reason for special interference in the facts on our side of the border. We reported that; and Government sanctioned it. The whole matter was elaborately reported on; and the papers can be laid before the Commission.

My attention has during my tenure of office been constantly kept to this matter of the effects of hemp drugs and opium. And I regarded this complaint as a case in which the extent of cultivation and use might be tested specially. So it received careful attention.

My opinion is that if we had lots of money for supervision and were ready to make people's lives a burden to them, we might improve the present system of administration if it be an object to check cultivation and use. But I do not think that there is any occasion for this in the Madras Presidency; and there is no room for substantial improvement in the present system. It is undoubtedly desirable that Government should know all that is going on, so as to secure any necessary control; but elaborate supervision would only mean the levying of blackmail on the inhabitants

without there being any sufficient justification for the adoption of that elaborate system.

I think that the prohibition of cultivation, except in restricted tracts, would be a hardship in respect to this, that the wrong people would be prosecuted. The Salt and Abkari Department has developed as effective a set of blackguards as we have in India when they are not controlled; and it would be an added terror to village life to let them loose on respectable raiyats. I should not like to be responsible for this. The opinion question cannot be regarded as throwing light on this; for there restriction is old and long established. It has settled down. We have nothing to do with it in this presidency. It is possible that existing establishments might enforce prohibition of cultivation, but I do not think they could without difficulty and abuse.

To drive the people by high taxation from the drug to alcohol might not be any advantage. I am doubtful. I know that the revenue has been recently very largely increased; and I am not sure that we need do more than leave the auction system to act. I think it would be quite fair to say this is an exciseable article and must not be grown without a license. This would be fair if feasible. I did not see my way to it. The limit of increased taxation as influencing price which I should be inclined to fix at present would be such as would not drive the people to alcohol. I see nothing at present to justify me in thinking that that would be a desirable change to bring about.

By the improvement effected in 1889, facts were ascertained which were not known before. This led to the facts regarding private cultivation being ascertained. This information cannot be regarded as general, because in the Madras Presidency the village system enables us to get the

fullest information regarding all the circumstances of the people. The system differs in this respect from Bengal. Our village agency puts us in possession of very clear views of facts if we inquire into them. The facts are that the hemp plant is found strewed in certain localities in the back-yards of any people who wish to cultivate it. This is the truth. And all that the Department knows is in a general way that that is so. I should like, for purposes of the careful control I have indicated, to have a return showing actually what was grown and what was done with the drug. But that would cost too much. The only other plan would be to restrict cultivation. If you were to order the stoppage of cultivation of hemp—or even rice—it would be done. There would be no difficulty in having the order carried out. The people would stop the cultivation: they are quite amenable. It would be stopped without the necessity of espionage and interference; but there would always be the risk of false charges. In Malabar they put toddy into a man's pots and get up a false charge. So they might have the plants handy. In Madras you could carry out any order, but it involves this risk. There is no agitation in Madras in favour of hemp; so I believe there would be complete submission. I understand that political agitators are entirely on the other side as far as this presidency is concerned. I am not prepared to commit myself to any opinion on the general question, whether, if the result of this inquiry elsewhere proved that the drug was specially injurious, the best time to inaugurate restrictive measures would be before the use became extensive, for the question is so extremely hypothetical in this presidency. There is, I believe, no tendency here in the use of this drug to extend, and I believe more people in this presidency injure themselves from tea than from hemp.

2. Evidence of MR. J. STURROCK, Collector, Coimbatore.

1. I have no personal knowledge in the matter. Concise replies gathered from the reports of my subordinates and the district medical officer, Coimbatore, are given below.

2. The definitions given may be generally accepted; but charas does not seem to be used or generally known.

3. It does not grow spontaneously in this district.

4. There are local names for the plant from which ganja is made; but I cannot tell whether they are all exactly the same plant or not.

5. There is no wild hemp grown in the district.

7. The ganja plant is cultivated on a few of the garden lands and in backyards of a few of the houses. The cultivation is not extensive, and it is rare to find more than four or five plants in the places where they are grown. Ganja, bhang, and another preparation called majum are made from the leaves, and no other use is made of the plant.

8. There has been neither increase nor decrease.

9. No particular method is adopted in the cultivation of the cultivated ganja plants, which grow in the midst of other plants, which require watering like garden products.

10. The cultivators are the same as the agricultural classes.

11. No.

12. No.

13. Not restricted. It is grown here and there in the district. It is reported to grow in brackish soil and in moderately hot climate. The ground must be kept always moist. It cannot be grown on dry land. It is grown on garden lands which contain wells.

14. (a) Ganja is prepared to a small extent here and three throughout the district.

(b) No.

(c) Bhang is prepared to a small extent.

15. (a) (A) A little water is sprinkled on a few ganja dry leaves and pressed by the thumb of the right hand in the hollow of the left palm, so as to separate the seeds, after which small pieces of tobacco are added to it, and it is then placed in a clay pipe called *chillum* and smoked.

(B) Ganja leaves are ground with jaggery, spices, etc., and made into confections, of which the most common is called majum, and is made as follows:—Dried ganja leaves are soaked in water for three days, cleared with water twice, dried in the sun or over a fire and reduced to powder. This is mixed with another powder made up of a number of spices, such as pepper, dry ginger, cardamom, etc. The composition is put

with palmyra, jaggery, molasses, honey, and ghee, and is made into a ball, from which small pills are made up for consumption.

Other confections, like *pooranathi* in boluses, are also made from ganja leaves and various spices. In these ganja leaves are used only in small quantities. This is eaten for the purpose not merely of intoxication but as medicine, and it is said to be also used for exciting sexual desires.

(C) The above-mentioned ganja powder is put into a little water and drunk. Where the drinker is so inclined milk, sugar and certain spices are added to make the beverage palatable. In some cases raw leaves are ground with water and mixed in water and sugar. This drink is popularly called *ramarasam*.

(b) There is no wild hemp grown in this district.

16. It is prepared generally in their houses. No wild plant is grown.

17. Among the people that use the preparation of this drug all classes may be included; but few use it except Rajputs and Maharattas, Musalmans and bairagis.

18. Bhang (solid) will not deteriorate for six months. Majum will not deteriorate for three months, and ganja for a year if kept carefully bundled without exposure to sun or rain.

License fees for—	Rs.
1889-90 . . .	120
1890-91 . . .	270
1891-92 . . .	2,510
1892-93 . . .	1,630
1893-94 . . .	1,020

19. There is no charas here. Ganja is used for smoking, for medicinal purposes, and mixed with spices, etc., as a confection.

20. No charas here. It is chiefly used by bairagis, fakirs, and other religious mendicants, and a few Musalmans, and the lower orders of the Hindus. Throughout the district the consumption is very small, and the proportion cannot be even guessed at with reasonable accuracy.

21. Sadai ganja (female plant), dry leaves with a little tobacco is used for smoking.

22. Nil.

23. No.

24. Maharattas, Rajputs, and Guzaratis drink bhang and call it *ramarasam*. The other classes eat it.

25. Neither increase nor decrease.

26. As above stated, this question cannot be answered. The consumers are an inappreciable fraction of the population.

27 and 28. These also cannot be answered.

29. *Vide* answer to question 15. Dhatura is not mixed here. No preparation specially known as bhang massala is prepared here; but the name might be applied to any of the preparations with spices.

30. Smoking is done generally in company. Bhang is generally taken in solitude. It is confined only to the male sex as a rule and only to adults. Majum alone is at times administered to children as a medicine.

31. (a), (b), (c) Yes.

32. The use of these drugs is generally held to be objectionable, both from a social and a religious point of view; but it is used on occasions of fire treading and hook-swinging, and cakes containing ganja in small quantities are offered at festivals to local deities or demons, and afterwards distributed among the votaries, who are mainly of the lowest class of Hindus. In such cases the use is regarded as essential; but it is temperate and not likely to lead to the formation of the habit.

33. The consumption is looked down upon as degrading, and public opinion, both social and religious, is against it. The use being in disrepute is due to the knowledge that it causes intoxication and leads to bad habits. In some few localities there is a tradition of sanctity attached to the plant, but no regular worship.

34. It would be a serious privation to habitual consumers, who however are very few indeed.

35. The consumption is so small that prohibition would hardly be noticed by the general population unless taken up as a grievance by demagogues; but habitual consumers would continue to secure what they require in spite of any prohibition not enforced by legislative measures on a scale out of all proportion to the magnitude of the evil to be dealt with. Prohibition of systematic sale without prohibition of the present casual cultivation would, I think, not only tend to prevent the spread of the use of the plant, but would lead to a certain proportion of the consumers substituting other drugs for ganja.

36. No.

37. There is no charas smoking in this district.

38 and 39. Consumption in this district is so small that I cannot satisfactorily answer the question.

40. (a) Yes.

(b) Yes.

41 and 42. *Vide* No. 38.

43. Yes.

44 to 50. *Vide* No. 38.

51. The few consumers of ganja and bhang in this district are mostly to be found amongst the bad characters.

52 and 53. *Vide* No. 38.

54. There is no reason to believe in the existence of any such practice in this district.

55. Yes; in a few cases. Yes.

56 and 57. *Vide* No. 38.

58. So far as this district is concerned, the effect of present administrative measures is too trifling to afford any ground for an opinion as to whether they are working well or otherwise.

59. The administration of this district must no doubt, follow the system required elsewhere; but I am disposed to think that the system of licensing shops, without other effective measures of control, tends to advertise the drug and lessen the strength of the popular sentiment against its use.

60. With the present very limited cultivation, I do not think restrictive measures are called for. They certainly would not reduce it much below its present limits, and might actually stimulate it by leading people to think their liberty was being unduly interfered with.

61. Nil.

62. *Vide* answer to question 60.
 63. *Vide* No. 59.
 64. There are none.
 65. I have no reason to believe that any of the preparations are unduly taxed under the present system of annual leases of shops.
 66. No.
 67. *Vide* No. 65.
 68. *Vide* No 59.
 69. There is no local option and none is needed, as the consumption is so trifling.
 70. No.

3. Evidence of MR. E. TURNER, Collector of Madura.

1. Consulting my subordinate officials and certain ganja shopkeepers. Neither I nor any one in the district have any practical knowledge of the subject. It is a district that may be left out of account in taking evidence regarding it.

2. The definitions of the flat and round ganja alone may be accepted for this district. Flat ganja is locally known as Dharmapuri ganja or Javatmada ganja and round ganja is known as Jada ganja. Broken ganja is not used here.

3. Spontaneous growth of ganja in this district is not known, nor do I know of its spontaneous growth in other districts.

4. It is known as ganja here.

5. Round ganja is grown here. It grows in sandy soil. Rain and water wanted for its growth. It grows in low lands. Hard soils are also suitable for its growth.

6. Growth ordinarily dense.

7. There is cultivation here for the purposes (a), (c), and (d) in Tirupuvanam, Kodaikanal, Kalligudi, Tirumangalam and Manalur and in some villages of Pulni and Dindigul taluks. It is generally grown in garden and backyards to a very small extent.

8. There has been a decrease and it is stated that it is due to the issue of licenses.

9. Land ploughed when moist and seeds sown along with brinjals and chillies generally.

10. The hemp cultivators do not form any special class. It is mixed in the few cases where it is sown with other seed.

11. No.

12. It is stated that there is no cultivation of wild hemp.

13. *Vide* answers against questions 5 and 7.

14. Ganja and bhang prepared in all the places where shops have been sanctioned and as far as they are required for sale. Large quantities of prepared ganja are imported from North Arcot District.

15. Preparation of ganja from the cultivated plant: the plants are cut down and left exposed till they get dry. The leaves are then separated from the stems and tied up in bundles.

Ganja is smoked thus. The above leaves are mixed with water and tobacco and smoked in a vessel for the purpose.

Ganja is eaten thus. The leaves with the drugs prepared from ganja are taken together.

Ganja is drunk thus. The leaves are powdered, mixed with dried ginger and other things such as pepper, etc., and drunk.

Bhang is prepared for eating thus. Ganja is floated in water, dried, heated, powdered, filtered, mixed with dried ginger, pepper, gallnut, jaggery and ghee and other *samans*. This bhang is of four kinds locally known as karuppu, purnathi, purnathi for children, and thathubushti. The first

kind has much of the intoxicating element in it; the second and the third are better tempered; and the last, as its name implies, is used to improve the pulse. For the preparation of purnathi 70 things are required, and the most important of them have been mentioned above. Bhang is drunk as ganja.

16. Bhang is prepared in licensed shops from flat and round ganja.

17. No special class.

18. Ganja deteriorates after one year; bhang, first sort (karuppu), after one week, and other classes after six months. Does not quite lose, but will be less efficacious. It gets a bad smell and becomes dried up. No special measures to prevent deterioration.

Stock account of ganja, bhang, and other intoxicating drugs prepared from the hemp plant in the district of Madura during 1892-93.

Item.	Quantity.	REMARKS.
	Seers. Tolas.	
1. Quantity of ganja, etc., remaining in stock at the beginning of the year	7 40	
2. Quantity received or manufactured in the year	4,940 56½	Ganja and drugs were sold at from 4 to 7 pice per tola.
TOTAL	4,948 16½	
3. Quantity sold by retail to consumers	4,821 44½	
4. Quantity sold to other vendors		
TOTAL	4,821 44½	
Balance remaining with shopkeepers at the end of the year	126 52	

19. Ganja is used for eating, smoking, and drinking.

20. A small proportion. Low classes consisting of fakirs and mendicants smoke ganja wherever they are. Also some Maruvars, Pallars, Agambadiars and Muhammadaus.

21. Flat ganja preferred for smoking.

22. Nothing is known of charas here. Northern pilgrims use it.

23. Bhang not so used.

24. As stated in the answer to question 20, bhang is generally used by low classes, but some of the higher classes, such as Brahmins, also use it. The bhang is drunk in special cases only.

25. The use of ganja and bhang are on the decrease since licenses for their sale are issued; but of these two, ganja is more largely used, as it is cheaper.

26. The habitual and occasional excessive consumers of both ganja and bhang are bairagis, weavers and Maruvars. They are also the habitual moderate consumers. The other classes are occasional and moderate consumers.

27. Rude classes. Indolent habits lead to the practice.

28. Ganja, 3 pies weight, worth two pies, is enough for (a) consumers; 9 pies weight, worth six pies, is wanted by (b) consumers.

Bhang one-quarter to three tolas by a moderate consumer, about three up to six tolas by excessive consumers. The price of bhang per tola is two pies.

29. For ordinary ingredients *vide* answer to question 15. No exceptional ingredients are mixed, Dhatura is not so used. Tobacco is admixed to add flavour, the other ingredients are used to make the preparation palatable and to promote digestion. Bhang massala is the ingredient already described, *vide* answer to question 15.

30. Smoking and drinking ganja is done in company and eating in solitude. The consumption is mainly confined to the male sex. Purunathi for children is administered to children.

31. Habit easily formed; difficult to break off, like every other habit. There is tendency to develop into the excessive. The Head Assistant Collector says: "Differs in tendency with different constitutions."

32. Ganja is offered to Karuppana Swami and other deities and then taken. The *pusari* takes the offered quantities for his use. The use of the drug in connection with such custom is regarded as essential. The offertory varies with the means of votary. The offertory may lead to a development of the habit by the *pusari*.

33. Some of the consumers take it as a medicine. Public opinion is against the practice. Its use is regarded as vicious, and one who uses it, becomes unfit for the conduct of business of life. Hence the public opinion is against it. The plant is not worshipped.

34. The consumers of both ganja and bhang who use it to overcome exhaustion may feel it a privation to forego the practice.

35. May be prohibited. Will be consumed illicitly then. Prohibition may be enforced by making cultivation, manufacture, sale, etc., penal. Discontent not serious. No political danger. The prohibition may be followed by recourse to other stimulants and drugs.

36. No. One shopkeeper has, however, stated in reply to the first part "Yes."

37. Charas is not known here.

38. Only flat ganja is used here.

39. There is not much difference. Smoking if in excess is also injurious. The Head Assistant Collector says: "Smoking is said to be more injurious." Just as with tobacco, there is a liability that the throat and sight may become affected. Such liability seems slight.

40. Prescribed to promote digestion, to revive appetite and to check diarrhoea. Used to a limited extent in the treatment of cattle disease.

41. Moderate use of bhang is reported as beneficial. The Deputy Collector, Madura Division, M. R. R. P. Theenathayalu Naidugaru, replies this part of the question in the negative. All classes use bhang when administered as a medicine. Both the uses are referred to.

42. Mr. E. L. Vaughan, Acting Sub-Collector, replies thus: "I have no reason to believe it harmful if used in moderation any more than is tobacco to a European." M. R. R. P. Theenathayalu Naidugaru, Acting Deputy Collector, Madura, writes: "Not harmless. Consumers lose health gradually." Mr. Walter Francis, Acting Head Assistant Collector, says: "Moderate use appears to be quite harmless and to be even beneficial."

43. Inoffensive.

44. It is refreshing. It produces temporary lethargy. It does not allay hunger markedly and is even alleged to create appetite. The effects do not altogether disappear for some few hours. Only after-effect seems to be a slight lethargy. Absence of subsequent gratification produces longing.

45. M. R. R. P. Theenathayalu Naidugaru answers all the questions in the affirmative. Mr. Walter Francis answers the questions in the negative. Smoking is said to cause some throat affections.

46. The first named officer mentioned in the answer to question 45 says: "Produces all the above effects." The second named officer says: "Habitual excessive use has been known to impair the intellect."

47. No.

48. No.

49. The drug is said to be aphrodisiac, but there is no general employment of it for this purpose; not by prostitutes. There is not much difference. Impotence may be produced. One shopkeeper stated that it increased potency. The Head Assistant Collector says, in reply to the last question, "not as far as can be ascertained."

50. Nil.

51. No. Moderate use has no connection with crimes.

52. No.

53. Not as far as can be ascertainable.

54. No cases have occurred here. It is said that complete stupefaction can be thus induced without admixture.

55. The substances mixed with it here are used to add flavour. Dhatura is not admixed.

56. It is stated that no differences are noticeable. One individual said that if ganja is drunk intoxication is greater.

57. The present system works well.

58. Cultivation is very limited. No additional provisions are required. The process of its preparation is sufficiently controlled.

59. Charas is not produced here.

60. No control seems required. The use of the plant is no way abused, nor is ganja cheap.

61. No objection.

62. No.

63. Ganja and bhang are taxed alike. The consumers are poor and an increase in taxation would cause discontentment.

64. Not necessary. Flat ganja is much used here.

65. The ultimate incidence falls now on the consumer.

66. No such houses or shops.

67. Yes, municipalities and other local bodies are consulted. Shops are located at reasonable distances where necessary, so that all consumers

may have the power of getting supplies with the minimum of inconvenience. The Head Assistant Collector says that there is no local public opinion on the point to be considered.

70. (a) No.

(b) Yes.

(c) No.

Evidence of MR. W. J. H. LE FANU, Collector and District Magistrate of North Arcot.

51. It appears from enquiry that only a very small proportion of bad characters are habitual or moderate consumers of drugs. The persons who generally resort to the use of ganja and bhang are either mendicants or fakirs, who have no family cares and have an apathy for work. The moderate use of the drugs has no connection with crime in general or with crime of any special character. The use of the drugs has not in this district acted as a stimulant to commit crime.

52. There is no record in this district of crimes being connected with the excessive use of any of these drugs.

53. It does not incite to crime of any kind. It appears that the use of the drugs, far from accentuating a tendency to commit crimes, retards it to a great extent, and the consumers become humble and timid. No instance is known in which it has led to temporary homicidal frenzy.

54. This question must be answered only in the negative. The general impression is that such drugs have the opposite effect.

55. Criminals do sometimes induce their victims to partake of these drugs without letting them know what they are in order to deprive them of their property; but such cases must be very rare. The extent of stupefaction depends upon the quantity of drugs administered, the nature of the mixture, if any, and upon the constitution of the consumers. It appears that complete stupefaction can be produced without admixture, if the quantity administered is large.

I must add that, in twenty-eight years' experience in South India, I have not seen as many as six cases of persons supposed to be in the habit of using, or under the actual influence of, such drugs. The very rare cases which I have seen were those of religious mendicants, fakirs, etc. None of these persons were violent or dangerous.

5. Evidence of MR. C. D. MACLEANE, Collector of Nellore.

1. From enquiries and observations of those who use the drugs.

3. The plant grows spontaneously in the Jawaudy Hills between Salem and South Arcot districts; the drug used in this district is called Jawaudy.

14. (a) and (c) are prepared and (b) is not known. *Desi* or broken ganja and Jawaudy or flat ganja are the varieties known. (A) *Smoking*.—Ganja leaf alone used in this either singly or with tobacco to increase intoxicating power. The leaf is rubbed between the hands and smoked through a chillum after being carefully separated from seeds or stalks. The effect is instantaneous and lasts for several hours, three inhalations being sufficient to intoxicate a habitual smoker. Also eaten with tobacco or betel leaf. (B) *Drinking*.—Bhang is drunk and prepared in various ways. It is in a liquid form. Leaf is well washed in water to remove the green colouring matter, pounded into fine paste, and then diluted. This is the commonest form resorted to generally by the poor. Those that can afford to do so add milk, spices, blackpepper, water-melon juice, etc. The addition of spices makes the drug more inebriating. (C) *Eating*.—Majum prepared in the form of electuary is much used by the disolute. The hemp leaf is fried in ghee and strained; to the jelly so formed is added milk and sugar; it is often left to cool, when it is cut into cakes and used.

16. Yes; by those who do not wish to mix with others. But generally resort is had to a particular place, such as the residence of a fakir or other habitual consumer, where the habit is indulged in company.

19. Ganja is used generally for smoking or for eating with tobacco; betel-leaf when smoking is not practicable. Persons suffering from asthma

generally smoke ganja. It is also used in suitable doses to induce sleep and alleviate pain. Drops of juice to allay eareache.

20. Charas not used in these parts as reported in answer to question 14. Ganja smoked by the lower orders, Hindus, and Muhammadans, and by ascetics, bairagis and fakirs, under the impression that it prolongs life. Bairagis and fakirs hold that it affords them religious visions. No particular locality can be fixed.

24. For classes *vide* answer to question 20 above. Proportion to population, say 1 per cent., at outside.

25. On the decrease, the reason being that the practice is considered disreputable.

28. One tola of ganja or one pie worth of bhang is enough for a habituated moderate consumer. The effect, however, depends upon the temperament or constitution of the person using it.

32. In Moharam and Holi festivals bhang and ganja are especially used. Amongst Muhammadans a child about to be circumcised is given two hours before the ceremony some majum in sugar as an anæsthetic.

33. Generally disreputable. There is no custom of worshipping the hemp plant here.

39. Ganja is smoked or eaten; bhang is drunk; and majum is eaten. Smoking is said to be more injurious. A single inhalation produces an instantaneous effect. Whereas in drinking more, an hour more or less (according as it is mixed or not with spices or other inebriating ingredients) elapses before the effect is produced. The reason is that in smoking the fumes act directly on the nervous system, whereas in chewing, or eating, or drinking, the drug enters the system through the various processes of digestion and assimilation.

before it begins to act on the nerves. It is less potent as it has no resinous matter, which is the most effective narcotic principle.

40. Bhawapakaxi, a work of the 10th century, prescribes it in dysentery. Susruta prescribes it in catarrh. The Arabic and Persian works are, however, more precise and detailed. In Makzanul Aduviaya, written about the beginning of this century, a full description of its medicinal properties is given, and various names are assigned to it. The author says that the leaves and bark make a good snuff for cleaning the brain; the juice applied to the head as a wash removes dandruff and vermin; it checks diarrhoea; it restrains seminal secretions, and is diuretic. Powder recommended as an external application to wounds and sores; poultice of the boiled root as cure for erysipelas; leaves spread on castor oil leaf are a cure for hydrocele.

41. The use of the drugs is not known to be beneficial, except that it allays hunger and fatigue temporarily.

42. I am unable to answer the question.

43. Yes.

44. (a) The immediate effects are exhilaration of spirits, cheerfulness, a slightly dizzy sensation.

(b) Yes, gives colour to complexion and exerts imagination.

(c) Yes; (d) yes, and produces thirst. (e) Yes.

(f) Depends upon dose and temperament.

(g) Abnormal hunger and sinking of spirits.

(h) Yes, it does produce uneasiness.

45. The eventual evil consequences are weakness of digestive organs, quickness of the action of the liver, emaciation, indecision of mind.

49. Yes, as majum or madanakamiswari. Effect is temporary.

51. No. There is very little connection, so far as at present can be ascertained, between crime and the use of these drugs.

54. No, not as far as known.

55. No.

No.

6. Evidence of MR. R. SEWELL, Collector of Bellary.

1. Very little personally or privately, except that I have been twenty-five years in India, and have sometimes seen people under the influence of these drugs. None of my Tahsildars have any special personal knowledge, but a stationary Sub-Magistrate of Kudligi taluk says he has had some experience while acting in that capacity.

2. Not known.

3. All Tahsildars, except one, say that it does not grow spontaneously in the Bellary district. The other asserts that it does. It is said to grow spontaneously in the Kurnool district.

7. If so, it is mostly in the back-yards of houses, but I cannot gather any definite information on the subject.

14. Charas is not used in the district; ganja and bhang are said to be prepared here and there by private people in scattered localities.

16. I am informed that ganja and charas are prepared at the place of growth of the wild plants, and that bhang only is prepared by people in private houses from plants growing in their back-yards.

19. Ganja is generally used for smoking, but it is also made up with medicines. A preparation called majum is made of ganja boiled with ghee, mixed with poppy seeds, and sweetened with sugar or syrup.

22. Bairagis, fakirs and the mendicant classes generally smoke ganja. No particular localities can be mentioned. A large number of the Muhammadans of Adoni are said to smoke ganja, and there is a good deal of it in Kudligi where the Tahsildar says that three-fourths of the males amongst the Boyas, and one-fourth of the males amongst the Lingayats smoke it. Kudligi is a very feverish and unwholesome place.

24. The classes that eat or drink bhang are mostly of people belonging to Northern India and Muhammadan, such as the Gujarati and Rajput settlers.

25. It is said to be on the increase, because it is very cheap, and it takes the place of liquor, which is expensive. One of the Tahsildars says that it is decreasing.

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28. Ganja:—(a) Habitual moderate consumers half tola to three tolas weight; cost about one-fourth anna per half tola.

Bhang:—About one-fourth tola per day; cost one-eighth of an anna.

(b) I have no information.

30. Apparently mostly confined to the male sex. I have never met with or heard of a female consumer of these drugs.

31. It is said to be easily formed and difficult to break off when once acquired, but I do not gather that there is any tendency for moderation to develop into excess.

32. The Tahsildar of Raidrug mentions that on the Siva Ratri festival, worshippers of Siva consume a liquid made of water, ganja, poppy seeds, sugar and spices; the other Tahsildars do not notice this.

33. Consumers of these drugs are universally looked on as slaves to a bad habit. The practice is in disrepute. To call a man a ganja-smoker or bhang-eater is equivalent to calling a man in Europe a drunkard. This is plainly because the excessive or immoderate use stupefies a man and destroys his mental keenness, just as habitual intoxication does. Hindus despise all such practices as self-indulgent, since people are, or ought to be, confirmed water-drinkers. Consequently there is an innate tendency amongst the Hindus of respectable castes to despise a man for any such self-indulgent practice; and this is enhanced by observing the effects of excessive consumption on the intellect.

I hear of no worship of the hemp plant except in Raidrug, where the Tahsildar says that it is worshipped by Rajputs.

34. Much as it would be to deprive an ordinary Englishman of his beer. The two cases appear to be parallel.

35. I can only speak from belief. I do not see how it is possible to prohibit the use of the drug, though of course public sale could be forbidden. The drug would certainly be consumed privately, and would probably be sold illicitly. I think that prohibition would occasion very serious discontent, just as it would in England if a Govern-

ment were suddenly to command that no man should ever consume beer, wine, or spirits. I think that it would result in very deep discontent, though it is too much to say that it would amount to a political danger in these parts, because the consumers of the drugs are in a minority. It would be felt as an utterly unreasonable attack on a man's liberty to please himself so long as he does no harm to others. Prohibition to consume these drugs would probably lead to increased consumption of alcoholic stimulants and other drugs.

36. I gather not, but on the contrary that the drugs are being substituted for alcohol.

39. Tahsildars all think that smoking is more deleterious than eating or drinking, because it appears to affect the lungs.

40. All Tahsildars say that native doctors prescribe ganja for diseases of both men and cattle.

41. The majority of Tahsildars consider that moderate use is beneficial. The only two Brahmin Tahsildars in the district aver that it is never beneficial, but always hurtful. My own opinion is that it has a distinct effect as a febrifuge in feverish tracts, and that natives often use it for that purpose. For instance, the people in the Godavari district, which is feverish, are great consumers of tobacco. In the streets of Coconada the smell of tobacco-smoke is everywhere. Children are made to smoke, and the reason probably is that the natives believed smoking to be a good preventive against fever. I think they consume these drugs for the same reason, very often.

43. I think so, quite. So do all the Tahsildars, except one, a Brahmin.

44. Moderately used it is refreshing. It is slightly intoxicating, allays hunger, increases appetite; effects last about six hours; want of subsequent gratification produces a longing and uneasiness. In fact it is very like alcohol in its effects, when alcohol is taken moderately.

45. Opinions differ, but I think that the general belief is that moderately used, the drug produces no noxious effects. It all depends on how much is taken. One Tahsildar of much experience says that moderate consumers find that the drug excites the mental faculties and enables a man to concentrate his attention on a subject that he wishes to study. Similarly it is said to be of great effect in enabling a religiously-minded man to concentrate his attention on religious subjects, and isolate his thoughts from things around him.

46. Habitual and excessive use produces all the

bad effects mentioned in question No. 45. It produces languor and insensibility to what is going on. I have frequently spoken to men, as witnesses, or in village streets, who seem unable to understand questions or frame answers, who seem as if their faculties were all asleep, and this has been accounted for by the remark by a bystander, or some one in court, that the man is under the influence of ganja or bhang.

49. All Tahsildars, except one, say that it is so.

51. I believe that the drug is constantly consumed by criminals in order to deaden their feelings and excite them, but whether use for such purposes would be moderate or excessive, I cannot say. Probably not immoderately, for that would cause drowsiness and laziness.

53. I believe not. All my Tahsildars say that it does not have this effect.

55. Yes; constantly when they want to rob their victims completely and effectually, but without personal injury to them. In these days thuggee is non-existent, but the thugs dealt largely in these drugs; and lesser criminals often find them very useful. I am told that complete stupefaction is only attained by admixture.

58. The present system is vend rent, licenses being issued for sale publicly in shops. I think it is working well.

59. I see no need for change.

60 to 63. See answers to 3, 14 and 16 above. I do not see how control is possible. We cannot pry into every man's backyard and see what he is doing there. To try and obtain a Government monopoly (like salt) would necessitate an immensely expensive staff of officials, and the enhancement of cost would be excessively unpopular for no compensating advantage.

63. None.

64. None.

65. Yes.

66. I see no reason for any change in the present system.

67. No.

68. Shops are licensed, and consumption on premises is not forbidden. I see no reason to make a change. I have never had any complaints of rioting or gambling or misconduct in those shops.

69. Yes.

Yes.

70. None.

7. Evidence of MR. H. M. WINTERBOTHAM, Collector of Tanjore.

1. I have twenty-four years' experience as a revenue and magisterial officer in nine districts. Locally I have consulted the divisional officers, medical subordinates, missionaries, licensed vendors of bhang and others.

2. On actual inspection of the shops, I find that "flat ganja" is the only form of hemp used as raw material. It is simply called ganja.

3. The hemp plant is not cultivated in Tanjore. Stray plants may be found here and there in gardens. The wild hemp plant is not found to the best of my information.

4. It is only known as ganja shedi, 'the hemp plant.'

7. No.

14. Ganja is imported. Charas is unknown. Bhang is not sold, but the local shopkeepers say it is prepared from flat ganja by some consumers in their own houses.

15. Flat ganja is imported ready prepared. Its subsequent treatment is described in answer 29.

16. The local shopkeepers (licensed vendors of ganja) say that bhang is a liquid, prepared by mixing ganja with milk, sugar, pepper and spice. In this form it is only prepared for private consumption, and not for sale.

17. Our licensed vendors (of whom there are 16) are Hindu Sudras (Naiks, Pillais, Chettis

Kallars) and Muhammadans. A few people of all castes make preparations of ganja for their own use.

18. The licensed vendors say that the flat ganja will not keep good for more than two years. It must be kept dry.

Trade.—There is no import or export by sea. The flat ganja is obtained from Kanniambadi and Kannamangalam in the North Arcot district. According to the accounts of the 16 licensed vendors, the quantity sold in 1892-93 was three thousand two hundred and eighty seers, of eighty tolas, of ganja, and nine hundred and seventy seers of purnādhi, etc. This quantity of ganja would supply about fifteen hundred people with half a tola a day.

19. Charas is not locally known. From flat ganja there are two well-known preparations, *viz.* (a) Purnādhi, (b) Mājiam.

Purnādhi.—The ingredients are ganja, dried ginger, sittarattai (lesser galangal), black pepper, nutmeg, cloves, mace, karva pattai (cinnamon), anise seed, liquorice, curmin, rose buds, surat āvārai (?), gallnut, ghee and sugar.

The ingredients are pounded up, and heated over a fire till the mass assumes the consistency of a black jujube. One-eighth of the mass is said to be ganja (excluding ghee and sugar).

Mājiam.—Cloves, nutmeg, mace and rose-buds are omitted, and their place is supplied by poppy-heads.

For purnādhi the ganja is well washed in water and purified. For mājiam it is mixed in its raw state.

20. Charas unknown. Ganja is smoked chiefly by bairagis and Musalmans.

21. Flat ganja is exclusively used.

22. Not used.

23. Not so far as I can ascertain.

24. When flat ganja is mixed with milk and sugar, and drunk as a stimulating beverage, this is said to be locally called "bhang." Mahratta Brahmans, and a few of all castes, are said to be occasional consumers in this form.

25. No remarkable data can be found to show any considerable variations in the consumption of recent years.

26. Except amongst the bairagis (miserable mendicant pilgrims from the north of India), I should say that habitual excessive consumers are extremely few. I have never met with a case myself, and this appears to be the experience of nearly all the district medical officers.

27. Some bairagis consume to excess habitually. A good many Muhammadans are habitual moderate consumers. I cannot answer more definitely.

28. Ganja sells at three tolas for one anna. Purnādhi is about one anna per tola. Mājiam is the same price as ganja. Half a tola weight is said to be a moderate day's allowance. A few consumers are said to take as much as four tolas weight per diem. The cost would thus range from two pies to 1½ annas a day.

29. *Vide* question 19. I cannot find that dhatura is used as an ingredient. The name of "bhang massala" is unknown. Purnādhi probably takes its place.

30. No rule can be affirmed. Bairagis smoke in company. The practice is almost exclusively confined to adult males. Some bairagi women smoke ganja. Purnādhi is largely used as a medicine,

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and is given to children in minute quantities as a soothing draught, a stomachic and tonic. If the ingredients are mixed in proper proportions, and cautiously administered, it must obviously be an excellent medicine for ordinary bowel complaints. The dose for a small child is said to be a pill as large as a grain of *dhal*.

31. I can collect no information of any value on these points.

32. No such custom in this district, so far as I can learn.

33. When taken as a medicine, the consumption is not regarded as blameworthy. When taken to gratify the senses, the consumption would be generally regarded by the high castes as reprehensible. The answer to the last question is in the negative.

34. The privation would, I suppose, be exactly what a European would suffer if deprived of the use of alcohol and tobacco.

35. So far as this district is concerned, there would be no justification for attempting prohibition. Unless the cultivation of the hemp plant can be stamped out where the plant grows, it would be impossible to prevent illicit consumption without an intolerable amount of spying and prying.

36. There is not the least reason to think so. Arrack (30 u. p.) sells at 1½ annas a dram, and toddy at from half an anna to an anna for eight drams. It is thus very much dearer than ganja and its preparations. I am rather apprehensive that the high price of toddy and arrack may drive the low castes to use intoxicating preparations of ganja.

37 to 39. Am not competent to answer.

40. Yes, constantly.

41. Does not fall within my province to answer.

42. To people who cannot obtain skilled medical advice, and who cannot afford to buy chlorodyne, Mother Seigel's soothing syrup, pain-killer and other patent medicines, the use of purnādhi and similar medicinal preparations of ganja must often be beneficial. If it is not the best medicine, it is often the only one available.

43. Perfectly so.

44. Not within my province.

51. I have not, in twenty-four years' magisterial experience, met with any crime directly attributable to the use of ganja. The bairagi pilgrims, who mostly use it in Tanjore, are generally harmless.

52. *Vide* 51.

53 to 55. I have met with no instances.

56 and 57. I have no information.

58. The sale of ganja without a license is already prohibited. For the last three years these licenses have been sold by auction. There are only sixteen shops for two and a quarter millions of people over an area of nearly 4,000 square miles.

59. I don't think any case can at present be made out for further measures in the direction of checking consumption.

60. Ganja is not cultivated in Tanjore.

63. No remarks.

64. No remarks.

65. If and when the severe restriction on the consumption of alcohol and opium drive the

lower classes to the use of ganja, further restrictions on the use of the latter will be called for. At present this ground for action does not exist.

67. No.

68. There are sixteen shops licensed for sale of ganja. The drug is never consumed on the premises.

69. The shops are absolutely inoffensive. No public opinion against any such shop has ever manifested itself.

70. The possession of hemp drugs for home consumption is not an offence, but I believe nearly the whole that is consumed is obtained from the local licensed dealers.

8. Evidence of MR. W. A. WILLOCK, Collector, Vizagapatam.

1. My answers are the result of enquiries made for the information of the Commission. In preparing them I have disregarded statements which are contradicted by the general body of the evidence before me where there is reason to suppose that they are based on mere hearsay.

2. The definitions of ganja and bhang are correct, but the words are very loosely used in this district. Ganja seems sometimes used for any preparation which can be smoked, and bhang for any which can be drunk. Charas is not separately known, but a process of cultivation seems sometimes to be adopted to encourage the production of the resinous matter, which appears to be mixed with the ganja produced at the same time. These are not known here.

3. I do not know any place where it grows spontaneously.

4. Ganja-i-patri and basava-patri. They refer to the same plant.

5. I doubt the existence of wild hemp in this district. The cultivated hemp sometimes springs up unexpectedly, and I think that this is the only reason for supposing wild hemp to grow here.

6. If it grows at all, it is scarce and scattered. I do not know it personally.

7. A plant or two is often sown in back-yards for the production of ganja and bhang. It is not cultivated for fibre, though other fibres are sometimes called hemp. It is not cultivated as a crop.

8. I see no reason to suppose that the number of plants grown has varied materially of late.

9. Some of the replies to the Commission's questions would lead one to suppose that the plant is transplanted in selected sites, etc. I do not believe this myself. I think a seed or two is sown, and the rest left to nature.

10. No. Any one who has a rich back-yard may grow it, but only grows two or three plants.

11. I do not think that the wild hemp is known here.

12. *Vide* reply to the last question.

13. Hemp grows throughout the district. It appears to grow equally well at the sea level and at an elevation of 3,000 feet, provided it has a good soil and abundant rainfall. There seems to be an impression that the produce of the plants grown in the hills is superior to that grown in the plains, but I am unable to say whether the elevation or the greater rainfall is the cause. Provided the monsoon does not fail, it can be grown anywhere in the district.

14. Ganja and bhang are, but I am unable to say to what extent (one sees but very few plants).

15. The methods of preparation reported are so various that I am unable to say more than that no very fixed system is adopted.

16. Bhang is generally prepared by the people in their homes, and can apparently be prepared

direct from the plant. The wild plant does not seem to grow here.

17. Religious mendicants and pensioned sepoys are the chief consumers. A good many of the Maharaja of Vizianagram's people, who have lived with the family in Benares, have adopted Bengal customs with regard to its use.

18. Ganja and bhang keep well for a year, but all depends on the care with which they are preserved from damp. Protection against it will enable it to be kept good for a long time.

19. I fear that my replies on this subject are not very reliable. My informants seem often to mix up the names in a most perplexing way. Ganja is usually used for smoking, but confections and drink are sometimes made of it.

20. The use of ganja is too rare to allow of my giving any guess at the proportion of consumers. The chief place of consumption is Vizianagram, and the chief consumers are religious mendicants and Brahmins, who have picked up the habit in Benares.

21. Opinions differ on this point, but I believe that bhang is sometimes smoked when ganja cannot be obtained.

22. The use of bhang is not confined to any class. The proportion of consumers is too small to estimate.

23. I am unable to say. I should expect an increase owing to the great increase in the price of spirits driving people to the use of other intoxicants. The accounts available are most imperfect, and the advent of large numbers of workmen from other parts of India in connection with the construction of the East Coast Railway renders comparison impossible.

24. Religious mendicants form the chief part of the excessive consumers. They find that it increases their power of becoming absorbed in their devotions, and that it in time destroys their sexual instincts.

25. (a) About 4 pies worth, or $\frac{1}{4}$ tola of ganja. (b) From one anna worth upwards or one tola and upwards.

26. Tobacco is usually used with ganja for smoking to improve the taste. Opium is sometimes used to increase the intoxicating effect. Spices of all sorts are largely used in making up the preparations which are eaten or drunk.

None (massala) seems to be known here.

27. Smoking usually takes place in company. The consumption of other forms follows no fixed rule. The male sex are generally the sole consumers, but they take to it at any time of life. Some preparations are given to children, but only as medicine.

28. The habit is easily formed and hard to break off, but it does not appear to tend towards excess.

29. No such customs are known here.

33. The consumption of any product of the hemp plant is regarded as disreputable. The reason appears to be the fact that it produces intoxication, which is looked on as disgraceful by all respectable persons. There is no custom of worshipping the plant here.

34. Bairagis and fakirs and a few excessive consumers would find it a serious privation, but I think moderate consumers would soon get over its loss.

35. No. It would be impossible without most inquisitorial penal legislation, and would cause serious discontent amongst the consumers and arouse the sympathy of others in their favour, even of those who regard the practice as disreputable. The discontent would not amount to a political danger here, because the number of consumers is small; but the prohibition would arouse the suspicions of other classes, and raise an outcry against needless interference in private affairs by the State. It is difficult to answer the latter part of the question, but I think that consumers would on deprivation take to alcohol or opium.

36. No. I should say that the change, if it exists, is in the other direction.

39. Smoking is generally regarded as more injurious than other forms of consumption.

40. Yes. They are used in native medical treatment and for cattle-disease, but only to a limited extent.

41. (a) There is a general agreement of opinion as to its improving the appetite.

(b) This is admitted by nearly every one consulted. The effect is only temporary however.

(c) It is used for the purpose, but it is doubtful whether it really does any good.

The number of consumers is too small to allow of this question being answered.

42. So far as I can learn, the moderate use of these drugs produces no harm in a healthy person for a long time. There seems to be some reason for supposing that after a long series of years it produces premature old age, but this is a point on which it would be impossible to express a decided opinion.

43. Perfectly so.

44. It is refreshing and slightly intoxicating at first, and stimulates the appetite. It seems doubtful whether it allays hunger. The effects are stated by various persons to last from two to twelve hours. Then depression follows. The information I have obtained about the latter part of this question is very contradictory.

45. (b) The general opinion is that in course of time it produces debility.

(c) Apparently not.

(d) No.

(e) It produces laziness, but not necessarily immorality or debauchery. It must, however, be remembered that the custom is regarded as reprehensible by the respectable and virtuous.

(f) I am unable to offer any opinion on the remainder of this question.

47. No, but the use of the drug is not common enough here to allow of a decided opinion being formed.

48. No.

49. Its use is said to produce impotence in the long run in many cases, but not invariably.

51. I have hitherto been under the impression that there was a very strong connection. I cannot remember details, but, according to my experience, it has been a common thing for Subordinate Magistrates and Police Inspectors in talking of important crimes recently committed in their charges to explain crimes of peculiar violence or atrocity by the remark that the offender was a notorious consumer of ganja or bhang. On instituting the special enquiries, the result of which I now report, experienced officers in several instances made assertions that such offences often resulted from the use of the drug, but to my surprise on being questioned they were not able to quote a single case which had come to their personal knowledge in which such had been the case. I then called on all Magistrates in this district, 28 in number, to report whether they could remember any cases which they had dealt with in which the use of these articles was in any way concerned. Two quoted one case each in which an offender was found insane, and the insanity was supposed to be due to the excessive use of ganja (which, of course, was mere surmise), but not a single case in which the hemp plant was, directly or indirectly connected with crime could be remembered by any of them. I asked for similar information from some of the most experienced Police Inspectors with exactly the same result in the end, though amongst them I found a considerable tendency to throw blame on ganja at first until closely questioned—a not surprising thing considering that the criminal classes are very frequently habitual consumers in the same way as they are habitual partakers of all other kinds of dissipation. Considering that the practice is reprehended by every one of them, this result is very remarkable.

I have been Sessions Judge of the Vizagapatam Hill Tracts, an area of about 12,600 square miles, with a population of 859,781, mostly members of genuine hill races, for the last 4½ years. During this period I have tried 24 cases of murder, 48 cases of culpable homicide, and 18 other cases of violence. In about 50 per cent. of these cases drink was the origin of the offence. In not a single one was there the smallest suggestion that ganja or bhang had anything to do with it.

I have examined all the prisoners in the district jail, 176 in number, of whom 17 acknowledge that they are consumers, and have read the judgments in the cases against them, and looked into the previous careers of the old offenders. There is not the faintest reason for supposing that a single one of them has been brought into trouble by the hemp plant. I have had details of the prisoners in the Parvatipur Hill Jail prepared, and have looked into their history also. The judgments were not forthcoming in my office in a few cases, and I did not think it necessary to call for copies, as the decisions in all the remainder confirmed the result I had obtained in the district jail.

I have done my utmost to find a single case in which ganja or bhang has contributed to the commission of an offence, and, in spite of the size of this district and its population of 2,802,292 persons, have utterly failed, and no one is more astonished at this result than myself. One thing surprises me still more, and that is the rash way in which men to whom the Commission's questions have been sent have replied verbally on this point. The fact of the matter is that the use of ganja is regarded as disreputable and disgraceful here, and not generally practised openly by the respectable classes. Consumers in good position are

therefore almost unknown. Its consumption undoubtedly is a form of dissipation, and the criminal classes are far more prone to indulge in all kinds of dissipation than others. Hence the idea that the use of ganja tends to crime, whereas the truth is that crime tends to lead men to resort to ganja.

A large proportion of bad characters are habitual moderate consumers of these drugs, but only because they have not the same reasons for restraint as respectable persons, and are generally more reckless and regardless of evil consequences.

52. So far as I can ascertain, the above remark applies with equal force to excessive consumers, subject to the qualification that excessive use tends to diminish general energy, and that the large class of religious mendicants, who are perfectly harmless, fall under the designation of excessive rather than moderate consumers.

53. No. As used in this part of India, it most certainly does not incite to unpremeditated crime. I not only do not know of a case of its causing temporary homicidal frenzy, but am unable to hear of any from my subordinate magistracy.

54. No.

55. There is an impression amongst experienced officers that these drugs are used to stupefy victims, but I can hear of no case. I am under the impression that the idea has arisen from information of a vague description given by prisoners themselves. I am unable to express an opinion as to whether the use of hemp products can produce complete stupefaction.

58. I think it meets the requirements of my district well. The use of ganja and bhang is but a very trifling evil here, if an evil at all, and it is difficult to see how to improve the present state of affairs without most serious interference with large numbers of innocent people. The advantage to be gained, if any, would be quite out of proportion to the annoyance and trouble which would result from closer supervision.

60. For the reasons given above, I do not think that any modification is called for.

62. I do not think it would be feasible here. It is not grown as a crop, and is often self-sown. My Huzur Deputy Collector had a plant in his garden lately which sprung up of itself. It would also be useless to control cultivation in the plains of this district, and leave it uncontrolled in the hills; but no one would venture to think of interfering with the hill men regarding its cultivation.

68. There are no restrictions as to the consumption of ganja on the premises of the shops here, but I do not think that it often takes place.

69. There are only five shops in the district. The neighbours are not consulted about their position. I think that they would regard the matter with indifference.

Oral evidence.

Question 1.—I am in the 25th year of my service. I have been fourteen years in this district, exclusive of the time I have spent here as Salt Deputy Commissioner. The latter period was about five years, and my jurisdiction then extended along the coast from Madras to Ganjam.

On receipt of the Board's orders regarding the selection of witnesses, I wrote to the heads of all the missions in the district, and invited them or their friends to come forward and give evidence if they so desired. I addressed a similar invitation to all members of local boards and municipal

councils through their presidents and chairmen. But in neither case did any witness come forward. All the answers I received were to the effect that the writers had no desire to appear as witnesses, as they were unable to give evidence of any value. So far as I remember, there was one exception, *viz.*, Mr. Laffamme, who informed me he was in direct communication with the Commission.

Question 45.—I don't think I have ever come across any case in which the hemp drugs have produced any injurious effect; but the matter has never been pressed on my notice before. I could not say the same of alcohol. I don't think I have noticed any injurious effects from opium; but on this point I don't wish to speak positively. From reports which I have received during my enquiries for the Commission, I have framed my answer to question 45, and I have nothing to add to it.

Question 59.—There are six licensed shops for this district; but we have only been able to sell five. The revenue of the present year shows a decrease from the figure reached in the first year of the auction-sale of the shops. This is not significant of a decrease of consumption; for there is no doubt the consumption of the last two years has been abnormally high owing to the influx of labourers on the East Coast Railway. I think that, whatever changes were made in the excise administration, the revenue of this district could not be materially raised. The shops are few and there is no demand for more. The practice of people growing the plant in their yards for their own consumption of course affects the revenue. But this practice is not very prevalent. I doubt if the plant is not grown in one village out of four, even in this casual way. Such plants spring up accidentally; for I saw a few days ago a plant in each of two yards occupied by police constables. These men would never have sown the plants, for they would have got a bad character with their superior on their being discovered. The contractors in this district get their supplies from the Kistna district as well as locally. A good deal of the local supply probably comes from the Agency immediately inland from Vizagapatam. I have heard no comparison of the quality of this ganja with that of the Kistna ganja mentioned. Extra taxation to any considerable extent would necessitate control of the cultivation. This would necessitate an increase of preventive measures. I am not opposed to an increase of the price of the drug if it were practicable. But preventive measures would be objectionable, because this would interfere with the people. There is already a fairly strong preventive establishment in the low country to control the hemp drug. But this establishment already harasses the people in connection with salt and abkari to the extent of 4,000 or 5,000 prosecutions a year. Additional interference in connection with the hemp drugs would add to these prosecutions, which are already a sufficiently great evil. The above remarks apply to the low country. Any interference in the agency might be productive of political danger; but I am not sure that the extent to which the cultivation is carried on there is such as to render any serious discontent likely. I did not know cultivation had been stopped in the adjoining States of Bastar and Kalahandi in the Central Provinces. This does not affect my opinion much, because the tracts where trouble might arise would probably be the hill country of the Eastern Ghâts, and not the comparatively level country between Bastar and Kalahandi. My reason for this opinion is based on my knowledge of the races which inhabit the tracts in question.

My impression is that the quantity of ganja grown in the Agency is trifling; but I had no opportunity of ascertaining facts for myself since this inquiry began. I have never been called upon to make an enquiry in connection with complaints of smuggling into the Central Provinces. I was Collector of this district in 1892. I should see no very strong objection to limiting legal possession to the amount which might be held to be equivalent to the produce of one or two plants. And my opinion applies to the Agency also. I say one or two plants; but my meaning is that no one ought to be made criminally liable for possessing the produce of the number of plants that are ordinarily found growing in a garden in this district. If you go further than this, preventive measures of an inquisitorial kind become necessary. In this district you hardly ever see more than one or two plants growing in a garden. I consider it would be more objectionable to allow cultivation, and have the preventive force marking down plants and searching houses when the crop was gathered with certainty of detection, than to prohibit cultivation altogether.

The people of the Agency Tracts, specially the hill people, are very much addicted to spirits

and toddy. No system of liquor excise has ever been framed for the Agency. The abkari revenue is leased by farms or shops in much the same way as it has been dealt with from the time when Government first began to exercise control over it. I am endeavouring to reduce the number of shops, but consider that it would be impolitic and dangerous to move too rapidly in this direction.

I cannot say that it is my experience that where the liquor habit is strong the ganja habit is practically unknown. I know nothing whatever on this point as regards this district. I do not even know where the ganja habit is most or where least prevalent. Returns from other provinces would lead me to suppose that such is the case; but I have no practical experience on the point.

I can say nothing definite regarding the extent to which the ganja habit prevails among the people of the Agency Tracts. My knowledge on the subject is practically *nil*. I have no reason for supposing the ganja habit to be more prevalent in one part of the Agency than in another. As regards foreigners, they are almost unknown in the Agency.

9. Evidence of Mr. J. THOMSON, Collector of Chingleput.

1. Only such as the head of this district can obtain from or through others. No personal observation.

2. May be accepted. Charas is not used in the district generally. The three varieties of ganja are locally known as padai ganja (flat ganja), vurulai ganja (round ganja), and avilu ganja (broken ganja or chur). Bhang or siddhi is known as bhang leaf. Charas is known as ganja pal (ganja milk or juice). Ganja is known as kalpam.

3. It does not grow spontaneously in this district.

7. The plant is not cultivated in this district.

13. No restrictions in this district.

15. Preparations for—

(A) *Smoking*.—Twenty-five to 30 grains of unimpregnated flowers (ganja) are separated from the leaves, etc., well mixed with dried tobacco leaves on the palm of the hand, and after being placed over a thin layer of prepared tobacco in a small bowl smoked through a short hooka.

(B) *Eating*.—Siddhi or bhang (leaves) are well boiled in water with ghee, and the jelly thus formed is cooked with milk and sugar into a paste, which, when it hardens, is cut into small tablets. The jelly secured by boiling the leaves is also mixed up with various confections, some of which are used as medicines. The chief temptations for admixing this drug in the confections are (1) on account of the pleasure of slight intoxication derived therefrom, and (2) on account of its medicinal effects as creating appetite, acting as an astringent or as an aphrodisiac.

(C) *Drinking*.—The dried leaves are ground with aniseed and poppy-seed, etc., and diluted in cow's milk or cocoanut milk or limejuice; spices are sometimes mixed. The preparation is called "Bhang" by Rajputs, Mahrattas, etc.; "Juice of Wisdom" or "Milk of Wisdom" by

Sudras. It is also called "Rama's Juice," i.e., the juice with the aid of which Rama (an incarnation of god) can be seen.

16. Yes, prepared by consumers in their own houses and wherever grown.

17. (A) and (C) of question 15, by consumers themselves.

(B) By native doctors to be administered as medicine, by shopkeepers for sale, and by consumers themselves in some cases.

18. Ganja is said to keep for four months, after which it deteriorates. Others not known.

19. Ganja is used for smoking as well as for eating in the form of confections, such as majum, purnadhi, madanakamaswari, manmathachintamani and sometimes used as drink; also mixed up with cocoanut milk, etc. Smoking and drinking are rare, but confections are resorted to mostly as medicines by all classes of people all over the country wherever native medical aid is resorted to.

20. Religious fanatics of all classes, known as bairagis, fakirs, sanyasis and mendicants and habitual beggars, such as pandarams, etc., smoke ganja. Charas not used in this district. Ganja smoking is said to be prevalent among the sepoys of the Native Army, both retired and in active service, to a slight extent. No specific locality can be given.

21. Flat ganja.

22. Charas not used here.

23. Not used for smoking.

24. Bhang is used as a drink by some of the Rajputs and Mahrattas as well as those enumerated under question 20.

25. Cannot be stated with any degree of accuracy, the men using them being of very obscure social standing.

26. Only ganja and bhang are used. In the case of ganja smoking, about 80 per cent. may be said to fall under (a), 10 under (b), and the other 10 under (c). In the case of ganja confections almost all under (a). In the case of bhang almost all under (a).

27. Habitual moderate consumers are the religious fanatics and mendicants and men of the poorer classes who cannot afford to indulge in the more costly drink of toddy or arrack. The religious fanatics, such as bairagis, sanyasis, etc., resort to the drug (1) for the concentration of their thoughts necessary in the practice of *yoga* effected by stupefying the senses, (2) as a means of rendering their constitutions proof against diseases. In these will be found a few of the class (b) also. Class (c) are persons who resort to the preparations from the drug as medicine.

28. (a) $\frac{1}{2}$ tola of ganja, costing 2 pies.
 $\frac{1}{4}$ tola of majum, costing 1 pie.
 $\frac{1}{8}$ tola of purnādhi, costing about 2 pies.

(b) 2 to 3 tolas of ganja, 8 to 12 pies.

Bhang, not known. Charas, not used.

29. (a) and (b) With ganja in smoking, only tobacco is used for keeping the fire and also for preserving the throat from getting parched up.

(a) With bhang, poppy seeds, pepper, ginger, sugar or jaggery, aniseed, cow milk or cocoanut milk to give flavour, improve the taste, and to render it medicinal.

(b) Bhang is mixed with dhatura in toddy and arrack to produce excitement and sexual passions and to produce a longing on the part of the consumer to partake of more liquor. Cantharides is also said to be mixed with bhang in toddy and arrack to produce sexual excitement.

No bhang massala sold here. Ingredients not known.

30. Ganja smoking is practised in company, generally in matams, etc., where the fanatics or the mendicants assemble while halting during their pilgrimage. Bhang, when consumed by habitual consumers, is done in their households in solitude generally, except on occasions of festivities; such as the last day of Dhasara, the Rajputs make a treat of it to their friends and relatives. Charas not used. Chiefly confined to the male sex and to adults. The confections of ganja are, however, administered as medicine to females and to children.

31. Yes. The habit is easily formed when a person descends to associating with the people using it, both on account of the cheapness of the drug as well as the prevalent custom among the consumers to offer it to those present as good manners and courtesy. The habit once formed it will be difficult to break off, and will develop into excess, as in the case of every other intoxicant, if indulged in by imprudent persons.

32. Ganja and the preparation from it known as majum are used as offerings to the family deities known as Katteri, Muniswaran, etc., who are all known as evil deities made use of in black magic. The offering is then distributed to those present, some of whom if used to it already, or if inclined to use it, make use of it. Bhang is served on the last day of the Dhasara by Rajputs, etc., to their friends and relatives. But these occasions are only periodical. The use on such occasions is considered essential, and is temperate generally, and not likely to lead to the formation of a habit. In some instances ganja and majum, $\frac{1}{4}$ tola each, are placed in a tray passed round a sick man's head three times and then thrown away in the street. This is done in cases of sickness due to the "casting of evil eye."

33. With great disfavour, except when used as medicine. The public hold the consumers in disrepute generally, although the religious fanatics

are excused the use of them. This is due partly to the evil effects of the drug and to the low and vulgar people using it. The hemp plant is not worshipped in this part of the country.

34. Yes, to those who are habitual consumers of the drug, and, it is said, may end fatally. But the number of such persons will be very small.

35. No, it will not be feasible, and the cost of such prohibition will be enormous if the result is to be successful to an appreciable degree. Illicit consumption must be the inevitable result. Complete prohibition cannot be enforced. It may occasion discontent, but it can never amount to a political danger, the users being themselves generally lazy cowards and held in disrepute by the public. The prohibition would be followed by recourse to alcoholic stimulants in cases where the consumers can afford to indulge in them, and to other drugs in the case of the poor.

36. No.

37. Charas not used here.

38. Only flat ganja is used here.

39. Smoking is said to be more injurious in its effects than eating or drinking. It is only the smokers that get emaciated and look like living skeletons. Smoking is besides said to affect the lungs direct. The drug when eaten or drunk is always mixed up with reputed soothing or cooling substances, such as ghee, cow milk, cocoanut milk and poppy-seeds, etc., which, to a great extent, counteract its injurious effects.

40. Yes, ganja is prescribed as a nervine tonic, as a stimulant for sexual enjoyment, as an astringent, as a means of securing digestion or creating good appetite, and, in short, it is held as a means of rendering the constitution proof against all diseases and for securing longevity. It is also used for making powder of zinc by burning it with thin pieces of zinc. In the case of bowel complaints of cattle, it is administered in plantain. Saltpetre burnt in green ganja leaves is given to horses when out of wind.

41. (a) Yes.

(b) No, except the drink of bhang, which is made use of as alleviating fatigue.

(c) As a febrifuge in case of fevers arising from cold.

(d) Ganja is primarily stimulant, then it is used as anodyne, sedative, anti-spasmodic. It is also used as a narcotic, diuretic and parturifacient. It is a powerful aphrodisiac.

The District Medical Officer says in answer to (a) to (c) that the drug is of no use.

Moderate habitual consumers use it chiefly as a digestive.

42. Not very harmful, if moderately used.

43. Yes.

44. Refreshing. Produces intoxication, followed by sleep and coma. It does not allay hunger; on the contrary, it is said to create appetite. The effect of intoxication lasts for about a couple of hours. The after-effects are exhaustion and semi-prostration. The want of subsequent gratification produces uneasiness.

45. (a) Ganja smoking (habitual) is said to produce lung disease and to emaciate the body.

(b) It weakens the pulmonary action.

(c) The stomach is not affected, but the appetite may be increased.

(d) A few suffer from these diseases.

(e) Opinions vary. The District Medical Officer says "no," while some others say that it induces laziness, but not habits of immorality or debauchery.

(f) The District Medical Officer says:—

"The moderate use does not deaden the intellect or produce insanity.

"It is a predisposing cause of insanity. I saw two cases of insanity produced by ganja being used in excess. In both cases acute mania was present, and in both it was permanent."

46. The District Medical Officer's opinion:—
"Ganja produces loss of appetite and strength, trembling and much mental weakness; excessive use produces moral inertia, a desire not to do any kind of work, mental or physical, and this state gradually leads on to cerebral softening."

47. Is generally held to be not hereditary, although the District Medical Officer considers it to be hereditary. The children of consumers naturally often take to the use of the drug from the force of example.

48. The District Medical Officer considers that it has a stronger hereditary tendency. The Sub-Collector says that the habitual excessive use of the drug generally impairs the constitution so much as to affect that of the children of the consumers.

49. The District Medical Officer says:—"A class of people called Setts on the west coast of India use all these drugs as an aphrodisiac. All the preparations are well-known aphrodisiacs, and so used by prostitutes. This aphrodisiac property induces finally certain spinal diseases, as locomotor ataxy and sclerotic of the cord. The free use of hemp does produce impotence."

50. The excessive use is held by the District Medical Officer to produce loss of memory, to induce nervous debility, cerebral softening, sclerotic of the spinal cord and brain, locomotor ataxy and insanity.

51. No; on the contrary, bad characters seldom

indulge in the drug at all; its effect is principally sedative, and induces indolence rather than active crime.

52. The excessive use does not induce crime, except when it ends in insanity.

53. No cases are known.

54. No.

55. Yes. Ganja in sufficient quantity, mixed with sugar and milk, is said to produce complete stupefaction.

56. The injurious effects of ganja are relieved to some extent by the admixture of some cooling substances, such as ghee, milk, poppy seeds, etc., and aggravated by that of cantharides and dhatura so as to produce undue sexual excitement; nuxvomica, dhatura, and bhang are introduced into country liquor to produce cerebral excitement and intoxication.

57. Ganja not eaten, except as confection. Charas not used. The District Medical Officer adds the following information to this chapter:—

"A tolerance (tolerant use) of opium imparts to the system a similar power of resisting the influence of ganja. Haschisch is the name of the plant in a particular dried state. In some people even the smell of the leaves, which is strong, is apt to produce intoxication."

58. The present system of auction of the right to sell works well. No improvement called for

62. No cultivation in this district.

63. No.

65. Regarded as an intoxicant; its (ganja) selling value is far too cheap in comparison with toddy and arrack. But in this district interference to vary its value is uncalled for.

68. There are five shops licensed to sell the drug and its preparations, but none where they may be consumed.

69. No. Local public opinion need not be considered under the present system of management.

70. No.

10. Evidence of MR. G. STOKES, Collector of Salem.

1. My answers are based on information obtained from the divisional officers and other officers, such as Superintendent of Police, Salem, Inspector of Salt and Abkari Revenue, etc.

2. Of the three narcotics prepared from hemp, namely, ganja, charas and bhang, bhang is the artificial preparation of ganja, and the remaining two are the natural products of hemp. Of these two, charas is not known in these parts. But ganja of the "flat variety" alone is known here. The definition of these terms may be accepted.

3. It is not known here that hemp grows spontaneously in this district. But it is said to be abundant on the Javadi hills in the North Arcot district.

4. It is known as ganja plant or bhang plant, and these terms refer to the same plant.

5. The resinous matter of the plant is said to be of better character if it is cultivated in cold and foggy climates and on hills. Excess of rain makes the plant thrive better, but the resin is comparatively poor. It grows well in red soil.

6. Scattered.

7. (a) Yes.

(b) Nil.

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(c) Yes.

(d) Seeds are taken occasionally for further plantation.

Hemp plant is grown to a small extent in gardens and back-yards.

8. The cultivation is carried on to a very small extent, and consequently the change is not perceptible. If anything, the cultivation would appear to be on the increase.

9. Ganja seeds are first sown and sprout forth in 20 days. The young plants, after some time, are transplanted at a distance of 3 yards from one another. Weeding and turning over earth takes place once a month, and the plant is manured with fowls' dung and watered once a week; and after six months the flowers and the ears of the plant are reaped, when they are sufficiently matured. They are then placed under heavy weights and cured, as is done for tobacco leaves, and then used.

10. No; they are agriculturists.

11. Wild hemp is not known in this district.

12. Ditto. It is said to be cultivated on the Javadi hills in the North Arcot district.

13. No; not restricted. As for soils, etc., see answers to question 5. The cultivation is not impossible in any soil except the saline soil.

14. (a) Yes; to a small extent.

(b) This is not known in these parts.

(c) A sort of drink is prepared from ganja by private individuals to a small extent for domestic consumption.

15. *Cultivated ganja*—

(A) *Smoking*.—Ganja is first rubbed between the palms, and is then mixed with water and tobacco and made into small balls and put into pipes for smoking.

(B) *Eating*.—Ganja is not taken in unless mixed up with some ingredients. The ordinary preparation of ganja is *purnādhī*. This is prepared as follows: Ganja is first fried and then mixed with pepper, ginger, etc., and made into fine powder, and is then mixed up with jaggery solution and made into balls.

(C) *Drinking*.—Ganja when prepared for drinking is called *bhang*. It is prepared by washing ganja with water and then grinding it with sugar, poppy seeds, almonds, milk, etc., and then used as a drink. But if milk is sparingly used, the mixture is capable of being formed into balls, when it becomes eatable.

16. (a) Yes; it is prepared for domestic consumption.

(b) Yes.

(c) The use of wild hemp in the preparation of ganja or charas is not known in this district.

17. By fakirs and sanyasis, and to a certain extent by the Muhammadans and the poorer classes of Hindus.

18. Ganja keeps good for five or six months, and, if preserved with care, it retains its effects even for a year. It is liable to be attacked by insects, and loses its effects if it is exposed to air for a long time. Deterioration may be prevented by placing ganja in closed vessels with some bits of camphor or pepper seeds.

19. Charas, as already stated, is not known in these parts. Ganja is made use of in smoking. It is also used in the preparation of *bhang* and other preparations.

20. Fakirs, sanyasis, Muhammadans, and the poorer class of Hindus. The proportion is comparatively small.

21. Ganja of the flat variety only is available here, and it is used for smoking.

22. Charas is not known in these parts.

23. No; not in Salem district.

24. *Vide* answers to question 20. The proportion of people using it is very small; but no figures can be given.

25. The use of ganja is said to be on the increase for the reasons (1) that it is cheaper; (2) that it has more lasting effect than liquor.

26. Information is not available.

27. The consumers are the Muhammadans and the poorer classes of Hindus. People who have not got much to do indulge in these drugs. No particular habit of life seems to lead to the use of them.

28. Charas and *bhang* are not sold.

Ganja—

(a) 1 tola, at a cost of 4 pies.

(b) Above 1 tola but less than 3 tolas.

29. Ganja, when used for smoking, is invariably mixed with tobacco. It is by the admixture of things, such as pepper, garlic, milk, sugar, etc., that *bhang* and other preparations are made. The object of the mixture was to lessen the bitterness of the drug and render it more palatable. *Datura* is not used. The preparation of *bhang* massala is not known in these parts.

30. Ganja smoking mostly is practised in company. *Bhang* is taken in solitude. The practice is confined to the male sex and above the middle period of life. It is administered to children to soothe pain, especially when Muhammadan children are circumcised.

31. The habit is difficult to form, as the initiative attempt is said to be anything but agreeable. But when it is once formed it is difficult to break off. The moderate use may develop into excessive when the consumer cannot control himself. It depends upon the strength of mind.

32. No information is available.

33. Ganja smoking is held by the public to be degrading. The use of any kind of intoxicant among the Muhammadans is not allowed in their Koran.

34. Yes; it would be. Once accustomed to it, the man must continue the habit, or he gets sick one way or other.

35. (a) No; never absolutely to prohibit.

(b) Yes, if prohibition be imposed.

(c) By legislation, if at all.

(d) Yes; will likely lead to disastrous results.

(e) Yes; almost so.

(f) Yes, as an alternative.

37. There is no charas smoking here at all.

38. Ganja of the flat variety only is used here.

39. Ganja smoking is said to be more injurious than eating and drinking of any of the preparations from hemp, as the ingredients which enter into such preparations lessen the ill effects of the drug, and render it highly agreeable to one's self. *Bhang* is said to sharpen the appetite, and it therefore does good to consumers. But it should not be taken too much, and it requires good nourishing food.

40. None of the drugs is administered by itself to people or cattle. But *halvas* or other preparations are made by native doctors, in which ganja is one of the many ingredients, and used by the people. Ganja, mixed with other drugs, is used for cattle disease.

41. *Ganja smoking*—

(a) It promotes digestion at first, but after some time it suppresses the desire for food.

(b) and (c) Yes.

Bhang—

(a) This does not destroy appetite, but, on the other hand, it is said to sharpen it.

(b) and (c) Yes. Hill people use it.

42. The moderate use of these drugs is said to be harmless.

43. Yes.

44. The first effect is the exhilaration of spirits and a sort of forgetfulness of mental troubles. Said to be refreshing. Ganja to a slight extent and *bhang* more. The effect lasts, in the case of ganja, for four or five hours. But in the case of *bhang* it lasts for eight or nine hours.

45. (a) The moderate use of the drug is not followed by any of the noxious effects so long as sufficient food is supplied.

(c) No.

(d) No.

(e) It produces laziness.

(f) No information is available.

46. No information is available.

47. There is no evidence to show that the habitual use of these drugs is hereditary; neither does it affect the children of the moderate consumers.

48. No information is available.

49. (a) No.

(b) No.

(c) Yes.

50. No information is available

51. This question is answered in the negative. There is a consensus of opinion that only in exceptional cases do bad characters take to the use, moderate or excessive, of hemp drugs. This shews that the use of the drug has no direct connection with crime. Ganja, like alcohol, while producing intoxication, induces in the earlier stages elation of spirits, which leads to brawling and petty assaults; but when taken in small quantities, it is stated, acts as a useful stimulant, both mental and bodily.

52. This question is partly answered by reply to question No. 51. Excessive use of hemp drugs leads to extreme depression of mental and bodily powers. Consumers of ganja have no tendency to any particular form of crime, except perhaps offences against decency; but since its excessive use impairs the power of those who consume it of distinguishing right from wrong, it leads to the commission of crime.

53. This question is answered in the negative by the officers consulted, except the District Superintendent of Police and the Joint Magistrate, who state that excessive indulgence in any of these drugs may cause temporary homicidal frenzy. Mr. Lowe, 1st Class Inspector of Police, Tirupatur Taluk, gives three instances of murder which he attributes to this cause. I have no experience on the point. I have heard, of course, of cases where persons under the influence of the drug have committed offences, but it has seemed to me that the offence was not the effect of this drug, but rather that this drug was used to give courage to commit the offence.

54. This is answered in the negative by the officers consulted, who state that criminals avoid ganja in order that it might not subject them to giddiness, and render them unfit for their contemplated designs.

It is generally said that criminals, in order that they may be complete masters over their victims, administer preparations of hemp drugs to them, but instances exemplary of this assertion have not come to notice in this district. Complete stupefaction can be induced by these drugs, but to render it more certain and effective, the head-quarters Deputy Collector reports that admixture of sugar is necessary.

56. Ganja is always mixed up with tobacco before it is used for smoking. In this case, tobacco removes much of the bitterness in ganja. The admixture of sugar, milk, almonds, etc., in the preparation of bhang removes much of its ill-effects and renders the drug highly palatable. In this district, dhatura is not used in the preparation of the drug, either for smoking or for eating and drinking.

57. No information is available.

58. Under the present system of administration the right of vending these drugs for consumption is put to auction and sold to the highest bidder.

59. The present system is working fairly, and no change is called for for the present.

60. The cultivation of the ganja-bearing plant and the process of its preparation are not at present controlled; but they being carried on to a very small extent, the state of things may be left as it is.

61. Charas is not produced.

63. There is only one kind of license at present which allows both wholesale and retail vend.

64. No.

65. (a) There is no charas in this district. There need not be any difference between the rates of the other two.

(b) Hemp drug is not in full working order here as the alcoholic drinks, and so no comparison can be made.

66. This question will not affect these parts, as only one kind of ganja (flat) is here consumed.

67. No.

68. In the shops here the drugs are not consumed on the premises.

69. The objections of the public are first considered before a shop is opened in any locality.

70. The drug is not taxed, but only the right of vend.

Oral statement by MR. LOWE, Inspector of Police, appended to Mr. Stokes' evidence.

One of the three cases alluded to by Mr. Stokes, as having been mentioned by me, appears in the Tirupatur Taluka police register as No. 115 of 1889. This case was tried in the sessions court. All three cases were tried in the sessions courts. They were all cases of murder, section 302, Indian Penal Code. In case No. 115 the accused was sentenced to death on the 16th October 1889. The accused's name was Madhan and he belonged to Pulicottah. The second case appears in the same police register as 45 of 1891. The man's name was Chimapillay and his village Guddur. His age was 75, and he was transported for life on 9th March 1892. He killed his wife and wounded a little boy. The third case appears in the same police register as 35 of 1882. His name was Mutta Chatti and his residence Tirupatur. His age was 50. He was sentenced to death. I do not know on what date. In all three cases the trying court was the sessions court of Salem.

Note by the Commission appended to Mr. Stokes' evidence.

[Three cases tried by the Sessions Court, Salem, and mentioned by Mr. Lowe, Inspector of Police at Salem, as attributable to hemp drugs. Only the High Court Judgments have been received in cases 1 and 2.]

Case 1.—The accused (Mutu Chetty) had kept a woman (Thayammal) for ten years as his concubine. She quarrelled with him and left him and went to her mother's house and refused to return to him, though it was arranged by a Panchayat that she should do so.

The accused took an occasion to follow Thayammal and murdered her. The defence was an "alibi," which was pronounced by the High Court to be unreliable. The accused was discovered (having fled the village and escaped to Burmah) through an intercepted letter, in which he made what was "possibly an allusion to the crime he had committed." This allusion was "owing to the unsettled state of my mind I did this act. It thus happened."

There is no mention of hemp drug in the judgment. The sentence of death was affirmed.

Case 2.—The accused (Madhan) cut his wife's throat, with intent to kill her, and afterwards attempted to cut his own throat. The refusal of the wife to return to the husband or the refusal of her relatives to allow her to return was held to have led to the commission of the offence. The accused pleaded that he was not in his right senses, but no defence based on insanity was put forward. The prisoner was "addicted to drink and to taking bhang." On this the judg-

ment of the High Court says: "This is no legal defence in answer to the charge, but it may account in some measure for the despairing state of mind on which the refusal of his wife to return to him operated. The prisoner had provocation, and seems to have been sincerely desirous to live on terms of affection with his wife, and was also eager for her return on account of his children, who were helpless without her. Though these matters did not constitute a legal defence to the charge of murder, we think we may take them into consideration in determining the sentence." Accordingly the capital sentence was commuted to transportation for life.

Case 3.—The accused killed his wife, and grievously wounded a farm labourer who interfered and protested. After summing up the evidence the Sessions Judge proceeds: "Accused pleads irritation by reason of his wife's abusing him in unbecoming language, and refusing to supply him with the morning meal. I believe this account of the matter. In the first place, when confronted with his statement to the police, the 5th prosecution witness (the head constable corroborates him) admits that accused gave him and witnesses 4 and 6 a similar version as he went along the road, which version he afterwards repeated in the station. Secondly, he is the only living person who can speak to what occurred prior to the killing, and there is thus no one to contradict him. Thirdly, both the 1st and 2nd witnesses told the Magistrate that accused and his wife used to quarrel, especially (1st witness says) when he was under the influence of bhang."

The provocation received by the accused was allowed by the Court as a reason for not passing on the accused the sentence of death. He was transported for life.

11. Evidence of MR. G. S. FORBES, Collector of Tinnevely.

1. The answers are framed on the information collected officially or furnished by the private gentlemen consulted. Representatives both of the Church Mission Society and of the Society for the propagation of the Gospel were among those consulted. The consumption in the district is so small that the information obtainable is meagre. During the official year 1892-93, only 1,833 tolas were sold in the licensed shops.

The population of the district is close on two millions, and its area between 5,000 and 6,000 square miles.

4. Ganja is the only name by which the plant is known here.

7. Practically none in the Tinnevely district. It is grown in one or two spots on the hills by labourers; and native physicians occasionally grow a few plants in their gardens.

13. There is no legal restriction.

14. None. The ganja leaves sold are imported chiefly from the Dharmapuri hills in Salem.

15. The ganja leaves are made up in three ways after they have been washed to remove the yellow deposits on the leaf.

(a) A mixture with tobacco on the leaf alone, for smoking.

(b) A potion, the ganja leaves being powdered and mixed with spices, poppy seeds, etc., and then dissolved or transfused in milk and water. This is known

locally as "baniya" or "bhang," the latter term being here used in a sense different from the definition in question 2.

(c) The leaves are reduced to a powder, which, after being mixed with various spices, is boiled with ghee and jaggery till a confection of the required consistency is obtained. This is called "purnadi" or "lachim."

In some cases dhatura seeds are added, if a strong intoxicant is required.

19. Please see answer to question 15.

20. Ganja is smoked by bairagis and other North India mendicants. The local wandering mendicants, known as Pandarams, and other ascetics also use it. A small number of Muhammadans and Hindus, as Brahmins and Vellalas, also smoke it; but its use is exceedingly limited.

21. Only "flat" ganja is used for smoking.

25. The use of ganja is reported to be on the decline since the introduction of the license system. But accurate figures are not available from which a definite conclusion can be arrived at.

26. The consumers of ganja are chiefly habitual moderate consumers.

27. *Vide* answer to question 20.

28. On an average above $\frac{3}{4}$ tola weight of ganja is daily consumed by an habitual moderate consumer, the cost of which is $3\frac{3}{4}$ pies.

29. *Vide* answer to question 15.

30. Ganja is generally smoked in company. The preparations made from it, "*purnadi*" and *bhang*, are consumed generally in solitude, mainly by men. Sometimes *purnadi* is administered medicinally in small doses to children in cases of indigestion.

31. (a) The habit is easily formed.

(b) It is difficult to break off.

(c) No.

33. Hindus consider the use of the drug otherwise than medicinally as not reputable.

37. In the answers under this chapter the use of ganja leaves only is referred to.

40. Ganja is prescribed by native physicians for insomnia, neuralgia, tetanus, hydrophobia, cholera, diarrhoea, and dysentery, and also as an aphrodisiac.

41. (b) The moderate use of ganja is supposed to give staying-power under severe exertion or exposure, and is occasionally used by the poorer labouring classes in such circumstances.

(d) It is believed to be useful in nervous and

spasmodic diseases, neuralgia, asthma, diarrhoea and dysentery.

The moderate occasional use is referred to.

42. It is harmless and often beneficial in sickness. This is the experience of a European missionary who has for 18 years been in charge of a dispensary open to all classes.

43. They are quiet.

44. It is refreshing and exhilarating, but in small quantities does not produce intoxication. It excites the appetite. It allays hunger. The effect lasts according to the quantity taken; the effect of a moderate dose usually lasts three hours. Want of subsequent gratification does produce longing in habitual consumers.

45. Reports are conflicting.

46. Habitual excessive use produces debility and impairs digestion and the moral sense.

47. No.

51. No; the consumption of this drug has no proved connection with crime.

53. Not in this district.

54. Not in this district.

55. No.

12. Evidence of MR. S. H. WYNNE, Collector, Godavari District.

1. Information collected as Head Revenue Officer of the district (Godavari in Madras).

2. Only ganja is consumed, and is known by that name.

3 to 6. Unknown.

7. Only grown to a very trifling extent for the production of ganja for private consumption.

8. None.

9. Only a plant or two is grown in back-yards or in the corners of fields.

10. (1) No.

(2) Yes.

11. No.

12. Wild hemp is not found in this district.

13. There is no restriction on production. I believe it can be grown anywhere in the district.

14. The ganja consumed is chiefly imported. As already explained, a small quantity is prepared for private consumption.

15. The dried leaves of the female plant (ganja) are mixed with tobacco and smoked. The dried leaves (ganja) are also pounded, mixed with spices, etc., and boiled with jaggery and then eaten. A beverage is prepared in much the same way, except that water or milk and a little sugar is substituted for the jaggery. This beverage is what is known here as *bhang*.

16. *Bhang* in the sense used in the questions is not used here (see answer to last question.)

17. By no particular class. As already explained, the preparation is only on a very small scale for private consumption.

18. Not much, so long as the substance is kept dry.

19. Ganja (*vide* answer 15) is used for smoking, drinking, and eating.

20. All classes and in every part of the district. The proportion of consumers is, however, probably not greater than 1 per cent.

21. Flat or round.

22 to 24. Not used.

25. Unknown; probably no variation.

26 to 28. Unknown.

29. Tobacco is mixed for smoking, and spices, sugar and jaggery for eating and drinking. *Dhatura* is not used; *bhang massala* is unknown; but a mixture of spices for use as above is sold, the chief ingredients being pepper, cardamoms, saffron, nutmeg, and camphor.

30. Ganja seems to be generally consumed in company, and almost entirely by males.

31. (a) Probably not.

(b) Yes, except by excessive consumers.

(c) Probably.

32. None.

33. (1) Disreputable.

(2) Ditto.

(3) Ditto.

(4) I am unable to say definitely.

(5) No.

34. The consumption is not confined to any particular class.

35. (a) No.

(b) Yes.

(c) No.

(d) Not very serious.

(e) No.

(f) No.

36. No.

37. *Vide* supra.

38. Round ganja seems to be more powerful in its effects.

39. Unknown.

40. Some native doctors prescribe it in combination. It is not used for cattle diseases.

41. I cannot say; but I believe it is used for purposes (a), (b), and (c).
 42. Cannot say.
 43. Yes.
 44. The effect lasts a few hours and is followed by increased appetite.
 45 and 46. I am unable to answer with confidence.
 47 and 48. No.
 49 and 50. Unknown.
 51 to 55. No.
 56 and 57. Not known.
 58. There is no effective control. Shop licenses are sold; but as there is no control of transport or possession, the control is little more than nominal.
 60. There is no cultivation or preparation for sale.
 61. Not produced.
 62. Bhang is not consumed.
 65. There is no taxation.
 68. No.
 69. No; there are only six shops in the district (for retail sale, not for consumption on the premises).
 70. As there is no taxation and no control over import, transport, or possession, there is no smuggling.

13. Evidence of MR. M. HAMMICK, Acting Collector of South Arcot.

1. My knowledge of the subject is very limited. In the ordinary course of revenue work, I have not gained a personal knowledge of these drugs and depend on reports I have received from time to time.
 3. None.
 5 and 6. I do not know.
 7. None, as far as I am aware, except scattered plants here and there in backyards, and perhaps a very small area on the Javadi Hills.
 8. There has been none, as far as I am aware.
 9. I cannot give any information on the point.
 10. No, I believe not.
 11. I am not aware.
 12. I am not aware that wild hemp is specially cultivated.
 13. No, the cultivation is not restricted.
 14. Yes, for private use and for sale to a small extent.
 15. I am not conversant with the preparation of these drugs.
 16. It is, I believe, locally prepared.
 17. Native doctors chiefly, I believe.
 18. It, I believe, deteriorates by keeping, but can be kept some months.
 19. Ganja is, I believe, generally used for smoking. It is also, I am told, occasionally taken internally as a medicine.
 20. The lower classes, chiefly Muhammadans, smoke ganja.
 21. I do not know.
 24. Bhang is, I believe, more costly than ganja, and not much used.
 25. I am not aware, but I am inclined to think that the consumption may be increasing. But, if so, it is doing so very slowly.
 26. I am not aware.
 27. Chiefly wanderers from other parts of India and the lowest class of Muhammadans. The better classes use the drug, I believe, as an aphrodisiac.
 28. I am told that a habitual consumer can get all he wants for one anna a day.
 29. Sugar and jaggery; I do not think dhatura.
 30. Neither females nor children resort to the drug.
 31. I believe the habit is easily formed, and is difficult to break. Habitual consumers feel the loss of the drug.
 32. I believe these drugs are not used in connection with any religious custom here.
 33. Generally public opinion is against the use of the drug.
 34. Local medical opinion is that it would be a serious privation to consumers to forego the consumption of the drug.
 35. I doubt whether it is advisable to try and stop the consumption of the drug altogether. It would always be consumed illicitly.
 36. The better classes prefer alcohol to these drugs.
 40. The drugs are used as medicines for men and cattle.
 41. I have had no sufficient experience to give an opinion.
 43. It is said so.
 44. I do not know.
 45 to 54. I have had no sufficient experience to answer these questions.
 55. I cannot remember any cases. But my impression is that bhang and ganja are used for criminal purposes. I have seen cases in which thefts have been perpetrated, probably by means of the administration of some intoxicating drugs to the victim.
 58. I think the present system is as good as any can be. If actual prohibition of the uses of the drug was possible, I should advise it. But I do not consider that it is advisable or possible.
 60. We have no control over cultivation, and I do not think any necessary in the district.
 62. The cultivation is so small here I do not see any necessity for controlling.
 63. I object to the system of sale of shops for retail vend, but I can suggest no better one short of prohibition, which I do not believe is possible.
 65. We want to get the highest possible revenue from the drugs with the least consumption. I do not consider the present taxation at all too high.
 66. I do not know enough to give an opinion.
 68. None.
 69. Local opinion ought to be consulted. But at present we have only one shop at each taluk kasbah and one at Porto Novo.
 70. No.

14. Evidence of MR. HERBERT BRADLEY, Acting Collector of Malabar.

Oral evidence.

1. I was Secretary to the Commissioner of Salt and Abkari when it was decided in 1889 to commence to control the use of hemp drugs in this presidency. I have been acting as Collector of a district since March 1892.

3. The plant grows from scattered seed throughout Malabar; but specially in Wynaad taluk. It springs up almost spontaneously.

8. There has, I believe, been neither increase nor decrease.

10. Hemp is only grown in back-yards chiefly for private consumption. All classes grow it in this way.

13. It is not restricted.

34. It would be a serious privation to all habitual consumers. It would be worse than depriving a smoker of tobacco.

35. It would not be feasible to prohibit the use of the drug. It grows so easily that the consumer would scatter a few seeds in waste or jungle land, and gather it secretly. It would require an army of men to prevent its consumption in this way. Prohibition would cause serious discontent, though not political danger, and would be followed by recourse to other drugs or alcohol.

36. I believe that hemp drugs are in some measure taking the place of alcohol because they are cheaper. There is not much increase in their consumption.

40. (a) Yes.

(b) Yes.

43. Yes.

58. As far as it goes, it is working well. It might be improved.

59. I would suggest the introduction of transport passes for more than small quantities intended for domestic consumption, and preventing all transport in larger quantities except by and for licensed dealers.

60. I do not believe it could be controlled in this district and in several others without an unnecessary amount of expense and probable oppression.

62. I do not believe it could be controlled.

63. The wholesale vend of hemp drugs is not really controlled. I would forbid their sales (otherwise than retail in licensed shops) to any one except a licensed dealer.

64. There are no regulations as to transport, including import and export. There should be some, I think.

65. At present I do not think hemp drugs are sufficiently taxed with reference to alcohol. I do not see how a heavier tax can be imposed when they can be obtained so easily.

67. I do not see how a better method could be devised here.

68. There are no such shops.

69. They are not consulted. There is no local public opinion on the subject worth the name. Probably an agitator could get up a plausible petition for or against a shop in every town or village in the district.

70. I do not think hemp drugs are imported in any quantity from foreign territory.

Question 1.—I have been fifteen years in the Civil Service. I was first attached on special duty to the Commissioner of Salt and Abkari in June or July 1885, and I remained practically in that capacity until January 1892. I was on furlough for nineteen months during that time. I have been Collector of Malabar since July 1892.

Question 3.—The plant will grow anywhere where the seed is scattered and the ground is damp. But I do not believe it is wild anywhere. Mr. Eber Hardie, Forest Officer, told me he had only seen it in places where there had been habitations. There is no field cultivation in Malabar at all; but the plant is grown in back-yards. I think in the Wynaad it will be found in every village, a plant or two in the back-yard of every consumer. There is more grown than they consume. There is no taxation, for no one will take a license to sell. There have been licenses, but there are none now. I have had an application from the Administrator of Mahé to purchase the drug from a person in Sultan's Battery. I had to refuse, as there was no license to sell. Then I believe, he obtained it from Madras. This year I wrote to the Administrator as to the consumption in Mahé, and he told me the drugs were not consumed. There is *Crotalaria juncea* grown in Malabar as a fibre-producing plant. It is used for nets, &c. I believe this is sometimes confounded with the narcotic hemp plant owing to both being spoken of as hemp. I do not believe that the narcotic hemp plant is grown at all for fibre in Malabar.

Question 35.—I consider that it would be impossible in the Wynaad to effect prohibition of cultivation. It is so jungly; and there are jungle tribes that do consume considerably. In other parts of the district I think that generally prohibition of cultivation would be possible. Such prohibition would be generally carried out without much interference with the people, but would be hardly possible in the jungly parts. Excluding the Wynaad and the jungly tract on the sides of the ghâts and at the foot of the ghâts the prohibition could be enforced. But the difficulty in South Canara and Malabar is to get at the people except in their own back-yards. The houses are far apart, and surrounded by compounds.

I think for ordinary tracts the present abkari staff might be sufficient to secure compliance with the order. I do not guarantee this.

The cultivators here are consumers. To stop cultivation would cause discontent among them. This discontent would be limited to those who cultivate for their own use. I think they would be seriously discontented. It would not amount to a political danger, but it would be serious. I cannot estimate the number of consumers in the Wynaad, but I believe it to be large.

Question 45.—I can say nothing whatever about the effects of the drugs. I have only found one man who admitted being a consumer. I believe that the general impression is that it is disreputable to use the drugs. The subject has never been brought before me in my magisterial capacity, either in Malabar or anywhere else. It has never been brought to my notice in connection with insanity. The District Magistrate does not send men to the Asylum or deal with their cases. They are inquired into and the orders are passed by the

Divisional Magistrate. I have had no official duties in connection with insanes as District Magistrate except as a visitor to the asylum. I was only a Junior Magistrate for seven years, and after that had no magisterial work for six years. Alcohol has certainly not come to my notice in connection with insanity, and I have no recollection of its being connected with any crimes of violence. I can remember no ill-effects coming to my notice in regard to natives. I have no reason to believe that either alcohol or ganja is doing any harm in my district. I allude here only to crime, not to physical effects. I have made two tours in the Wynaad, where the drug is mostly used. I have asked my subordinates to find men who used the drug. They brought up men; but when I asked them, they all but one mau denied it. These were not jungle men, though it was in the Wynaad; but jungle men are not the only consumers there. The Wynaad was the only part I visited after getting the Commission's questions. Before that I had never endeavoured to find out in the district whether ganja was used. I had when I was Secretary to the Board. I do not know that a considerable percentage of insanity is ascribed to ganja in Government reports. I have not studied lunacy. I know that the people will not admit using the drug, and take that to be a popular feeling against it; but I do not know of any feeling among the people that it is injurious. I know nothing of injurious physical effects from ganja; but I have seen a few natives in hospitals whose ailments were ascribed to alcohol.

Question 58.—I have no suggestions to add to what I have made in my paper. If it were feasible and possible, I should recommend prohibition of cultivation with a view to much greater restriction. This view is not founded on any experience of the drug, but on what I have heard of the drug. If what I have heard of it is true, it would be a good thing for the country if we could stamp it out. What I have heard is entirely from Europeans. My feeling about the desirability is founded on what may be called the European opinion of the drug; what is said in books, in missionary papers; what I have seen in newspapers and in pamphlets; and chiefly from what I have read of this evidence before this Commission. All this is so much against the drug that I think prohibition of cultivation seems desirable.

I have no sufficient material for forming an opinion as to whether ganja or alcohol is more deleterious. If two men were brought to me, one intoxicated with ganja and the other with alcohol, I should not know the difference.

Prohibition of cultivation being impossible, I have no suggestions beyond those contained in my answers No. 59 and No. 64 for improvement of system in Malabar. I am not prepared to say anything about the rest of the province, as I have not considered the subject in other districts.

Question 63.—I understand that the rule as it at present stands is that no one may sell without a license. And what I desire is that the rule prohibiting sale by a cultivator except to a licensed vendor should be enforced; and more than that, I would compel every cultivator who sells to take a license of vend before selling to the licensed vendor. This would, I think, restrict cultivation. I do not think it would interfere with the licensed vendor's supply, as I believe he would get men to take out licenses and grow for him.

Question 65.—I do not see how a heavier tax could be imposed without prohibiting cultivation. Nor can I say what proportionate taxation would be. I cannot determine the relative intoxicating effects of this drug and alcohol.

Question 15.—I have no personal recollection of the action of the Board in 1889, being due in any way to what was heard of the effects of the drugs. I may have been on privilege leave when the first orders issued. At all events, I do not recollect the grounds of the action taken. My impression is that the limitation of the action taken to sale was due to so little being known of the drug. I think, however, that the origin of the matter was at the time the Act was passed, and that the policy was started before the Act was passed. The fixed fee license was first imposed; but I think it was the intention from the very first to go on to auction. Of course everything that was done was tentative. I am aware that in the excise reports the Government have expressed surprise at the amount of consumption these measures brought to light. One of the objects of their measures was to ascertain the amount of consumption and to find out generally about the drug.

15. Evidence of MR. C. H. MOUNSEY, Acting Collector of Cuddapah.

1. My experience as a Revenue Officer.
2. In some parts of this district what is really the male flower is called the female and *vice versa*. Imported and locally made ganja are known as follows in this district:—

- (1) Mulki, local.
- (2) Almoori, from Bezwada and surrounding places.
- (3) Shamshabudi, from Hyderabad, etc. (this is round shaped).
- (4) Javvaji, from Madras.

The name of siddhi is not known. Charas is not made. In the sub-division, flowering tops of female hemp plants are pressed under heavy weights, exposed every day in the morning to the sun, and then made into small packets. Ganja and bhang in Pullampet taluk is colloquially known as gnanapatrika and seedhapatrika. Flat

ganja is known as almarpatri, and round or broken ganja as gnanapatri.

4. Zanapa in Telegu, sunni in Hindustani.

7. (a) and (c) Yes.

As back-yard cultivation; some 10 or 20 plants at a time, or in odd corners of garden cultivation with ragi and chillies throughout the district. Its cultivation by the area (to the extent of three to five acres) is only in Vemula and Velupulla of Pulniendla taluk, Zella Slapalli, Mittaomidipalli, Ledapalli, Chennampalli, and Kannavaripalli of Cuddapah taluk, in Gadikota and Mudumpadu of Rayachoti taluk, and Garwikota and Dhannavada of Jammulamadugu taluk. It is said only four or five acres are cultivated in Cuddapah taluk.

8. The cultivation is said to be on the decrease owing to the enhancement of prices arising from the right of sale being limited and being put up

to auction having decreased the demand. This would apply only to those who cultivate for the market, and might make in this district the difference of one or two acres. I do not see how the back-yard and petty garden cultivation which are for home consumption and private sale to friends could be affected by this. On the other hand, the taxation would increase such cultivation.

9. On this I can merely say that the cultivation is much the same as that of an ordinary garden crop, such as cholam. The ground must be well ploughed and manured. The seeds are sown close together, transplanted when four or five inches high, and attain full growth in about six months. Watering is necessary throughout the cultivation.

10. (a) No.

(b) Yes.

11. No.

12. No.

13. No.

14. (a) *Ganja*.—Yes, for home consumption, practically wherever grown; for sale to dealers, in the few villages where grown to a large extent.

(b) *Charas*.—No.

(c) *Bhang*.—Apparently only to a small extent in Jammulamadugu and Cuddapah taluks.

15. I respectfully refer for the answers to this question to the Hospital Assistant of Chitvel and the Apothecary of Badvel. I was not able to obtain such definite information; but the information I did obtain shows that their answers are correct.

They are quoted below, as well as a quotation from a report from the Collector of this district, dated 6th December 1886.

Extract from letter No. 5010, dated 6th December 1886, from the Collector of Cuddapah, to the Secretary to the Board of Revenue, Separate Revenue.—“(b) These different sorts of drugs are manufactured from the hemp plant in this district, and they are (1) ganja; (2) bhang; and (3) majun.

“(1) Ganja, which appears to be in use in seven taluks of the main division, is made from the dried flowers of the hemp plant. The distinction of sex is not generally known here. The flowers, sufficient for one dose, are soaked in water and then rubbed on the palm of the hand. The water that has soaked into them is then squeezed out and a sort of paste formed of them. To this paste is added tobacco, and the whole is made into a ball, which is put into a smoking pipe and used.

“(2) Bhang seems to be used only in the sub-division, and in Cuddapah and Jammulamadugu taluks of the main division. The process of manufacture varies in each. In the sub-division the process is as follows:—The leaves are ground with jaggery and milk and the preparation is used for smoking. In the Cuddapah taluk it is as follows:—‘After the seeds are removed * * * the buds are boiled in water in a vessel, taken out and cleaned, and then made into a paste by rubbing. Grains of pepper, gingelly, seeds of cucumber, dried cocoanut, poppy-heads, all in small quantity, are mixed with paste, and the whole is ground well. It is then dissolved in water and drunk with or without sugar.’ In Jammulamadugu it is as follows:—After the seeds are removed, the buds are pulverized and the powder put into water, in which sugarcandy had been previously dissolved. To this is added a paste made of poppy-seeds, cloves, nutmegs and cardamoms well ground, and the whole is used as a drink.

“(3) *Majun*.—This is used only in Cuddapah town, and the process of its manufacture is described as follows:—Bhang (the flowers of the hemp plant) mixed with milk or ghi and sugar and confection of sweetmeat is made. The confection is called majun.”

Badvel Apothecary's reply.—“The wild plant is not used. The dried flowering tops of the plants are stored, and from this preparations are made for use whenever necessary.

“(a) The dried flowering tops (ganja) is powdered, and with a few drops of water well mixed into a mass, along with a small quantity of tobacco leaf, and, so prepared, the mass is smoked in a chillum, hukka, or rolled into cheroots in some leaf.

“(b) *Eating*. (1) Ganja is added to meat curry (generally mutton) just towards the end of the preparation of the curry, and thus eaten. This is known as bhang kura, meaning meat preparation.

(2) *Majun*.—Ganja mixed with jaggery into a semi-liquid mass, eaten as such.

“(c) *Drinking*. Sabji is supposed to be a delicious drink prepared with jaggery, ginger, poppy seeds and almonds. The term sabji is not applied to the leaf, as suggested by Dr. Prain in question No. 1.”

Chitvel Hospital Assistant's reply.—“(a) The flowering tops of the ganja are squeezed flat and are sold. This is ganja. Take a small portion of ganja, about a tola. Wash out three or four times in cold water, remove the seed, and continue washing till the washing water is clear; dry it up by friction, and put it in a smoking pipe with fire. This is for (a) smoking. Again, the same flat ganja is prepared into pills for (b), eating in the following ways:—(1) Take a small quantity of it, wash it well, then mix with jaggery to make pills. This is for eating and used for medicinal purposes by some higher orders. The same ingredients, along with treacle, honey, cardamoms and ginger form the confection. These pills generally contain ganja, from 2 grains to 2 tolas.

“Lastly as for (c) drinking. The following proportion is made:—Take ganja two parts. Sugar, pepper, poppy-seeds, cloves, each one part. Grind each separately with milk. Ganja should be washed well with cold water before grinding. Now dilute them with milk. Filter these well till only the fluid remains. The proportion of milk added varies. Some say half a seer and some one seer. This is called the sabji pannee or ramapannee for drinking. Most useful at Benares, Calcutta, etc., among the higher classes.

“(a) Continued.

“For *bhang*.—This does not seem to be much used, except by the lower orders. This is prepared in the same way as ganja for smoking.

“Majun is prepared by bhang, butter, sugar, flour, and milk, and mixed together. This is for eating purposes, and is also sold in the bazar. It is not used for drinking purposes.”

Extract from M. R. A. Katakapeswara Iyer's reply.—“(b) *Eating*.—There are three preparations for eating, viz:—

(1) majun;

(2) ganja halwa;

(3) bhangdalli.

“(1) *Majun*.—Prepare treacle or molasses out of jaggery or sugar, and mix with it cleaned ganja in the proportion of 4 to 1. Stir up the two together till the ganja is well broken into small

pieces and mixed up with the treacle; then cool it. It will become solid and fit for consumption. This preparation is made and sold by the contractor in small pieces.

"(2) *Ganja halwa*.—Take a convenient quantity of ganja, remove the seeds, wash it five or six times, and then put it into a pan and boil it in water. In the course of boiling add a small quantity of broken poppy-heads. When both are well cooked add ghi. The essence of ganja and the poppy is drawn into the ghi, which is extracted and secured in a jug. Again, a treacle of sugar or jaggery is prepared, with which spices, cus-cus, almond and dried grapes are mixed. A small quantity of the prepared ghi, above referred to, is then added, and the whole is properly stirred up and cooled. This is called ganja halwa.

"(3) *Bhangdalli*.—Meat, ghi and bhang cooked together and mixed with ordinary curry massala forms bhangdalli.

"(c) *Drinking*.—The preparation of ganja for drinking purposes is called here sabji. It is prepared as follows:—Remove the seeds and sticks from the ganja and take it, or if bhang leaves are available, take them. Wash either six or seven times to remove the sticky substance; grind it well with water; make it into a pulp. Get bhang massala, consisting of dry ginger, pepper, saffron cardamoms, and rosebuds, and grind all these into a pulp. Mix the two pulps together, and add sugar or jaggery, milk, plantains, fruits and spices, according to the taste, convenience, and means of the consumer."

16. Yes. I am told no.

17. Ganja is prepared by both cultivators and consumers. Bhang by consumers. Charas is not prepared in this district (*vide* answer to question 20 *re* consumers).

18. Ganja, the dried flowering tops, if stored in a dry place, will keep good for at least a year; some say longer. Bhang must be consumed almost as soon as made or it will deteriorate. Yes, it loses its effect in time. One year. Dampness and bad storing.

N. B.—Charas not being made in this district, no evidence applies to it.

19. Ganja is practically used only for smoking in this district; but it is occasionally used for eating and drinking.

20. Musalman fakirs. Smoking ganja seems universal among them. They meet together in the early morning at makkams and smoke in company. Ganja smoking is further said to be not unknown among any other class of Musalmans or any caste of Hindus; but the higher the caste the less the probability of the people thereof smoking; and, except the low castes, the smoking is indulged in their own houses. I can make no guess at the proportion of smokers and non-smokers.

21. In this district it is said that round or chur ganja, called balachur, is preferred for smoking, but flat ganja, as a rule, is the only sort available.

23. No.

24. In the hot weather a small proportion of ganja-consuming fakirs eat or drink bhang, chiefly in Cuddapah and Jammalamadugu taluks. A few Hindus may like it now and then.

25. In Cuddapah, where ganja is most largely consumed, the consumption is said to be on the increase. They say that, where some 20 people took it twenty-five years ago, 40 or 50 do so now, the cause being the opening of shops. In Piler, which

borders on North Arcot and where hemp is largely grown, it is said to be more consumed than formerly. In other places the consumption is said to be on the decrease, owing to the higher price arising from taxation, and in Vempalli I found that they said 10 persons smoked now to 20—twenty years ago.

26. (a) and (b) The information I could get myself was not very reliable. Out of seven smokers in one place, I saw only one who could be considered an habitual excessive consumer, and in most places none were found.

(c) and (d) I could get no information. Possibly the cultivators of the plant may come under heading (c).

27. Chiefly fakirs smoke. They say they do so because their ancestors did so. Because it is good for digestion. These men live by begging. It seems that it is the poorer classes that smoke more than the rich; but no information can be obtained as to how far the agricultural classes who cultivate hemp smoke. People who have much work in water and those who work in feverish places are said to take it to relieve pain. Others who take to the practice may be considered men of not much stability of purpose, who take to it from seeing others do it.

28. The amounts given varied very much; but I gather for ganja the quantity used is about two drachms, costing two pice a day, and not so much is spent in bhang. For excessive consumers the amount taken is mostly limited by their resources. If more than one anna's worth is taken, then it becomes excessive.

29. To ganja—

(a) Tobacco to improve the flavour or to make it more intoxicating.

(b) White poppy seeds are added. One authority, the Chitvel Hospital Assistant, says dhatura is exceptionally used for the same purpose.

Bhang massala is composed of poppy seeds, spices, pepper, cloves, cinnamon, saffron, sugar, and almonds. Apparently two parts of bhang are used to one of each of the other substance.

30. The invariable practice is to consume in company. It is confined to the male sex; not generally begun before early manhood; but one smoker I saw declared he began when ten years old. Children do not use the drug.

31. The habit seems easily formed; but whether it is easy to break off or not, I cannot so easily answer. Those smokers who from poverty could not get the drug said they just went without it. I presume there is a little more difficulty in breaking than a tobacco smoker would find. Judging from the number of excessive smokers found, I should say there was a slight tendency for moderate consumers to become excessive ones; for all, however, appear to begin moderately.

32. *Nil*.

33. The habit is not looked on favourably; the practice is condemned. Presumably because it leads to intoxication and laziness. On the other hand, it is said some religious people think it enables the will-power to be controlled, and that its use is therefore holy. If so, they are exceptions to the fact told me that consumers were ashamed of letting people know they were so. On the authority of the Hospital Assistant of Sidhout alone, it is said that these religious people worship the hemp plant once a year.

34. Yes; as far as I could make out, fakirs look upon it as a necessity of life, and others,

who take it to keep off pain and disease, would become at once liable to such things.

35. In my opinion it would not be possible. The drug would be consumed illicitly. I do not see how the prohibition could be enforced. Preventing the cultivation of hemp might be the best way. The prohibition would occasion serious discontent, especially among fakirs. Whether this would be a political danger or not it is difficult to say. *Per se*, I should say not, and beyond that I do not feel able to give an opinion. Judging by analogy, I think that opium or alcohol would be substituted for hemp drugs.

36. No.

37. Charas is not smoked here.

38. Not as far as I could learn.

39. One Hospital Assistant says smoking is more injurious than eating; another says it is less. I could not find out myself.

40. Yes; I believe it is. Two good native doctors have replied to the questions from Cuddapah, and I presume they have fully answered. I append a copy of the Chitvel Hospital Assistant's answer for the convenience of reference:—

"Yes; prescribed for bronchitis, mixed with sugar or jaggery; for diarrhoea, mixed with tonic and sugarcandy; for colic, mixed with impure salt (common), potass nitras, aconite root and betel leaf juice; for general nerve tonic, mixed with nutmeg, saffron, and musk in pills; for sleep producing, pul, nux vomica, dhatura seed, nutmeg, cardamom and cinnamon bark in pills; for cattle diseases; for general tonic and milk secretion, ganja one part (sazzalee), kambu one seer, well ground and mixed with jaggery, administered in balls; for pneumonia, ganja one part, and dried and well washed dog-skull leaves two parts, mixed and administered in pills; for belly ache for buffaloes, flowers of the male plant are used in pills mixed with jaggery."

41. (a), (b) and (c) Yes. All moderate habitual consumers. Here again I give the Chitvel Hospital Assistant's answer to this question:—

"(d) Creates temporary vigour and laughter, specially native regimental classes, some lower orders, boatmen, ascetics, beggars, bairagis, Maharata vagabonds. All these use them to a smaller or greater extent for (a), (b), (c), and (d). The ascetics use them for intoxicating purposes also. The moderate habitual use that I refer to both the abovenamed. As for the moderate occasional use, it is used for medicinal purposes with baneful effects by a small minority of all classes."

42. I think the use of it bad, as it engenders the necessity of using it to give sleep, to give appetite, etc. That it is harmful also I should gather from the general thinness of the smokers I interviewed. On the other hand, one consumer assured me he has regularly used ganja from the time of the great Nandava famine, 62 years ago, and he by no means looked the age that would have made him.

43. They are so. Even if intoxicated, they go to sleep, and do not become quarrelsome.

44. The first effect appears to be one of refreshment and of pleasant mild intoxication. In the habitual consumers it allays hunger; in the moderate it creates it. The effects last an hour or two. The after-effects are a feeling of exhaustion.

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45. My enquiries elicited that the habitual moderate use emaciates people, and if they do not get food soon after consumption, their mental qualities would suffer; otherwise it was harmless, as it improved digestion and appetite. Only bad ganja, and not what they call in Cuddapah *mulki ganja*, causes dysentery and bronchitis or asthma. It induces laziness, but not immorality; it improves the mind if food is taken after it; otherwise it may lead to an inoffensive sort of irrecoverable insanity. Three or four people were said to be so affected in Cuddapah; but this was not admitted by all. They all agreed that if a man once went insane through the use of ganja he never recovered.

46. To this question I copy out the replies of the Chitvel Hospital Assistant:—

"Case from habitual excessive use.—One native, Sudra by caste, private Tamillam agent in profession, in moderate well-to-do circumstances, lived in one of the petahs in Madras. He had one bad practice to attend the *dhargikhana*, which was in front of his house, every now and then, and became a beginner in ganja smoking. For three or four years, as long as fortune was for him, he lived in peace and harmony with his wife and had three female issue. His age would be 35 or 36 before this bad habit was acquired. He had some of his children lost. Children grown, family multiplied, then poverty slowly crept in by his neglect of work. In the meanwhile he became a pukka smoker. Family disputes and confusion arose. Seeing this, he deserted them and led a lazy, secluded, and vagabondizing life. After a full smoke, laughter, religious singing, with frequent cough would follow, and sometimes very bad abusive talk at the sight of his wife and mother, who in turn abused him for having left them in a miserable state. Sometimes his temper was so much irritated that he would pounce upon his wife with an attempt to kill her by biting her throat. This showed a tendency for homicidal frenzy. At last excessive smoking and starvation rendered him impotent, and in a few days after insane. This case I saw about twenty-five years ago."

47. I think not.

48. I do not know. If the father emaciates himself by excessive consumption, I presume there is less chance of the child being a healthy one.

49. It is said to be used even by prostitutes. Its excessive use is said to produce impotence.

50. See previous answer.

51. No; none that I could trace.

53. No; not that I could hear of.

54 and 55. No information available.

56. I could get no information. I give the Chitvel Hospital Assistant's reply, *viz*:—

"(a) The effects of hemp use in moderation are modified by the admixture of lime juice and sugarcandy in the form of confection and majum.

"(b) Effects of hemp in excess are also modified by the above admixture of lime juice and sugarcandy. For personal consumption and for administration to others, if more intoxicating effect is required, it is generally used with dhatura, nutmeg, nux vomica, or bondu seeds."

57. I could not get any information as to the different results.

59. I am acquainted with it. It seems to be working well. I do not see any other system would be better.

60. They are not controlled, and I do not advocate control over them.

61. It is not produced.

62. No; because I doubt its feasibility. It would give rise to many opportunities for oppression, to extortion on the part of subordinates, and possibly result in cultivation being given up, and large farms started with an actual increase in the amount of the said cultivation.

63. No wholesale vend here. I have no objection to the retail. I object to bhang being prepared at all; but as it is prepared privately, it would be difficult to stop this. I should make its preparation penal, but only have a light punishment for the offence.

64. There are no regulations. I think free passes might be issued for transport of the drugs.

It will enable more control to be exercised over the production of, and traffic in, the article.

65. It seems reasonable.

66. No.

67. No.

68. There are shops licensed for the sale of these drugs, and nothing is in the license to prevent consumption on the premises. I have no objection to this system, which allows control, and if this be not allowed, gatherings in private houses under no supervision will result.

69. No; they are not consulted. The Collector reports to the Board of Revenue on report from Tahsildar, through the Divisional Officer or from his own knowledge, whether a shop is advisable or not. I don't think public opinion (so-called) should be considered, because the opinion given could not be guaranteed to be the real public opinion.

70. No.

16. Evidence of MR. C. M. MULLALY, Acting District Magistrate, Kurnool.

51. No; the moderate use of hemp drugs has no connection with crime in general or with crime of any special character.

52. The excessive use of the drugs merely stupefies the man and renders him incapable of any premeditated and sustained action, and does not necessarily incite him to criminal acts.

53. No; I do not know of any case in which the excessive indulgence in the drugs has led to temporary homicidal frenzy.

54. No.

55. No.

17. Evidence of MR. F. D'A. O. WOLFE-MURRAY, Acting Collector of the Nilgiris.

1. By enquiries from intelligent persons likely to know.

2. For this district the definitions of ganja and charas are correct.

3. In this district, abundantly in the South-East Wynaad portion.

4. Ganja, siddi shrub, or bhangi. Yes.

5. A good soil, well manured by cattle and human dung; moist climate; rainfall, 90 inches; from 2,000 to 5,000 feet above the sea.

6. Dense as a rule in congenial soil.

7. Yes; in South-East Wynaad, in back-yards of houses for (a), (b), (c). Also on the northern slopes of the hills, Sholagars grow a small quantity for smoking.

8. A decrease, as the cultivation is generally thought to be prohibited.

9. Seeds are sown in April and May. After June small plants are cut out. The female plants mature in January, when they are cut and dried. In cattle kraals seeds are sown broadcast. Plants are thinned to 5 or 6 feet apart, so that they may spread branches. When male plants mature and get sticky with resin, the flowering tops are collected.

10. No special class cultivates it. Yes; as a rule.

11. Yes; in parts of the district.

12. Yes; but to a small extent only, and this on the northern slopes of the plateau. It is.

13. No. *Vide* reply to question No. 5. Plenty; there is much barren and poor soil on the plateau, which grows nothing.

14. Yes. No particulars ascertainable as to localities exactly, but to no great extent. I may mention the area of the district is only 957 square miles, and the population 99,801.

15. Flat ganja only is known to be prepared. Mature female plants are cut into lengths of one to one-and-half feet and tied in bundles. These are placed under weights for a few days. Owing to the resin exuded, each bundle becomes a sticky mass. Ganja is used for smoking. The flowers are separated from the mass, mixed with tobacco and smoked in a pipe. Charas is not sold. Persons prepare this for themselves by squeezing the green leaves with the hand, and mixing the exuding resin with tobacco and smoking the mixture.

16. Bhang can be prepared by grinding the green leaf with pepper, cardamom, dry ginger, and a flower called madanakam. Sugar is added, and the whole boiled in milk and drunk. It is reckoned good for cardiac and stomachic affections. It is not generally prepared. It can be so prepared from the hemp plant wherever grown, and so also with ganja and charas.

17. By all consumers.

18. All deteriorate, and in time lose all effect. I cannot say how long it will keep. The chief cause of deterioration is "*tempus edax rerum*." Preservation in air-tight tin boxes.

19. Not for smoking only. Ganja mixed with other drugs is given as a tonic to cattle and elephants. Majum is a sweetmeat in tablets made by grinding up ganja, molasses, and ghee together. Purnadi is made of ganja, jaggery, and other spices compounded together, and used as a tonic.

20. All through the district, Sholagars, bairagis, Rajputs, Mhians, and Muhammadans smoke ganja. The first three, 30 per cent. of the number, perhaps use it; of the others, a very small proportion.

21. Flat as a rule; but broken ganja is also sold for the purpose.

22. Native charas.

23. Yes; to a small extent by Muhammadans throughout the district.

24. The townsmen of Ootacamund drink bhang to a small extent.

25. No increase. Liquor has a more warming effect in this cold climate; and beer is also much drunk.

27. I should say the same circumstances which lead all or most people able to afford it to give their guests champagne at dinner parties, viz. the general desire of humanity for some stimulant.

28. (a) Half a tola, costing Rs. 0-0-3.

(b) Four tolas, costing Rs. 0-2-0.

29. Tobacco and dhatura. To give a piquancy to the drug.

30. Smoking only is practised in company. Males only. Ganja is given medicinally to children.

31. (a), (b), (c) Yes.

32. No such customs here.

33. Not regarded as disreputable when moderately consumed. Habitually excessive smokers are looked down on, just as an habitual drunkard is. Bhang is drunk and majun eaten at marriages and feasts. No sects worship the hemp plant.

34. Yes; probable. Habitual consumer, if deprived of the drug, might do mischief. Human beings are creatures of habit.

35. (a) No.

(b) Certainly.

(c) Yes.

(d) No; not here.

(f) Undoubtedly, to both (a) and (b).

36. No.

37. Yes; ganja is the strongest, and its effect is more prolonged.

38. Flat ganja is supposed to be the best as strongest.

39. Smoking is more injurious than eating or drinking. Skilled physiologists must say the reason.

40. Yes.

41. (a) Yes; used as a tonic.

(b) Yes; bairagis use it for this purpose.

(c) Yes.

(d) Bhang is used for asthma and other diseases, and smoked as a germicide and disinfectant.

42. The moderate use is practically harmless, as witness the rate at which the population of the country is increasing.

43. Yes.

44. (a) Moderate stupefaction.

(b) Yes.

(c), (d) Yes; hunger is allayed during the stupor.

(e), (f) No creation of appetite. Effects last from 20 minutes to 2 hours.

(h) The want of it produces uneasiness.

45. (a) Yes; moral and physical deterioration may be caused; no disease.

(b) No.

(c) No.

(d) No.

(e) Induces laziness, but no other vices.

(f) I know of only one instance where its habitual use has caused temporary insanity. A Muhammadan peon in Anantapur, suffering from its effects, saw a man on the road, a cooly. Shouting out he was a pig, he rushed at and killed him, and was convicted of murder. I have been sixteen years in India.

46. The excessive use of any drugs is, of course, baneful.

47. No.

48. It must naturally affect the children: in the case of alcohol, "Saturday night's" children are proverbial.

49. (a) No.

(d) Yes; if used in excess.

51. No. None.

52. The only instance that has come within my knowledge personally in sixteen years is the one I have quoted against question No. 45.

53. Yes; occasionally. Yes; vide above.

54. Not to my knowledge.

55. Yes; occasionally. The secret police reports furnish occasional instances.

56. Dhatura and tobacco strengthen the effects. Vide the secret police reports.

58. I opened a shop in Ootacamund this year and have to control sales.

59. It has only been working a few months, and the time has not yet come to form an opinion.

60 and 61. Not controlled here. The extent of cultivation and preparation is but small.

62. It would be quite impossible to control it here properly owing to the wild and mountainous character of the country and the quantity of jungly places where it could be grown.

63. No.

64. No.

65. Taxation, which is in the shape of licenses issued to the sellers, is certainly reasonable. I would raise the taxation in future if it is found the sales increase, because the articles are more or less of a luxury.

66. No.

67. No.

68. No consumption occurs on the premises of the one shop licensed.

69. Yes; a shop was opened in consequence of applications. Enquiry was made as to suitable location of the shop. Yes; local public opinion should be considered.

70. No Native States near.

18. *Evidence of MR. L. C. MILLER, Acting Collector of Trichinopoly.*

1. I have consulted the subordinate revenue authorities in the district, and my answers are based on their reports, which are enclosed.

2. Charas is scarcely known. Flatganja is the only commonly known form. It is said to be made by cutting off the flowers of the cultivated hemp plant and allowing them to dry in the shade; they are then pressed. This is flat ganja, known locally as sadai ganja. Ganja is also known locally as korakarrumoligai. Subji and bhang as known here are preparations made to drink from ganja. The dried leaves of the hemp plant are said to be used by native doctors for medicinal purposes. Flat ganja alone is to be found in the drug shops in this district, with preparations made from it.

3. Does not, so far as I am informed, grow in this district spontaneously.

4. It has only one name in this district, *viz.*, ganja.

5. There is no wild hemp in these parts.

6. Not known.

7. Ganja plants are sparsely cultivated for (a).

(d) Ganja is not cultivated for its fibre or seeds. The plant known by the name of Pulichei (*Hibiscus cannabinus*) is cultivated for its fibre to a small extent.

8. No fluctuations are reported, and the area is very small.

9. Ganja is cultivated on a poorish red loam soil, which is dug up and mixed with red sand and ashes. The seeds are sown in small holes two inches deep. When the plants have grown $1\frac{1}{2}$ feet high, they are manured with pigeon's dung. The plants are watered every day. They require but little water. They take six months to mature. Pulichei seeds are sown in some cases singly on dry lands and in some mixed with ragi (*Eleusine coracana*) on wet and garden lands. It takes six months to mature.

10. They are of the same classes as other cultivators.

11. Not here.

12. Not known.

13. The cultivation is nowhere restricted.

14. Almost all that is used here is imported as ganja, and not prepared in the district.

15. There are no preparations from the wild plant. Cultivated hemp is used in this district.

(a) *Smoking*.—The ordinary flat ganja is moistened a little and smoked either alone or mixed with a quarter tobacco.

(b) *Eating*.—Leaves are powdered and mixed with sugar and eaten. Some people eat raw ganja; some mix it with jaggery and spices.

(1) *Pillai legiyam*.—Ganja is fried in ghee, strained, and mixed with sugar.

(2) *Purnadi legiyam*.—Ganja is washed several times in hot water, dried and powdered and mixed with ghee, sugar, dry ginger, pepper and spices.

(3) *Majiyam*.—This is the ordinary kind. Ganja is dried over the fire, powdered, and palmyra jaggery, spices, and even plantains are added.

(4) *Billai*.—Ganja is powdered, mixed with jaggery, dried ginger and pepper, and made into cakes.

(c) *Drinking*.—Ganja is boiled and cleansed. It is ground with spices and mixed with milk and sugar and a drink is made, usually by consumers in their own houses.

16. Ganja can be easily prepared from the cultivated plant. Bhang drink is always prepared in this district only from the plants grown in the Javady hills in the North Arcot district and imported into this district.

17. There is no restriction as to the class of people. The preparation of ganja is usually carried out by the cultivators.

18. Ganja loses its strength by exposure to air. Ganja and bhang keep for one year without deterioration. After two years they quite lose their effect. It is kept from exposure to the air by being wrapped up and placed in baskets.

19. Ganja is used for smoking, eating and drinking, and for medicinal purposes. Charas not available in this district.

20. Smoking of ganja is confined to the lower classes. Generally Muhammadan and Hindu ascetics and mendicants and some of the worn out pensioned sepoys and few others who cannot afford to purchase liquor smoke ganja.

21. Flat ganja only is known.

22. No eharas is used here.

23. Bhang is not used for smoking here.

24. The comparatively well-to-do classes among the smokers eat or drink bhang; but this is what is known here as bhang, apparently a preparation of ganja and not a different part of the hemp plant.

25. No accurate information.

26. I am not able to give details.

27. The people are of the lower classes. They are mainly beggars and fakirs. Among occasional consumers it is said to be consumed by day labourers and toddy drawers to relieve them of pain after their labour and induce sleep. It is first commenced as a medicine, and its use gradually becomes habitual.

28. (a) Moderate consumers take from $\frac{1}{2}$ tola to 1 tola a day, costing from 1 pie to 6 pies.

(b) Indeterminable; the amount would appear to be limited by their means. Six men were examined by the Head Assistant Collector as to their own consumption, and the quantity ranges from $\frac{1}{4}$ tola to 6 tolas. One of them says that his priest takes 40 tolas a day.

29. (a) Tobacco is used in smoking to give taste.

(b) Those who are not habitual consumers and wish to excite themselves much mix dhatura or nux vomica.

No bhang massala is sold in this district. Jaggery, other spices, milk, etc., are used in other confections or drinks to give taste.

30. Ganja is usually consumed in solitude at home, but if a consumer receives a visit from another they smoke together. Its use is generally confined to men of all ages. Beggars and fakirs commence taking it at a very early age and continue through life. Other classes do not usually become habitual consumers till middle age, though

they take it at all ages medicinally. Ganja is boiled with ghee, and a sweet preparation is made for children as a preventive of diarrhoea and dysentery.

31. The habit of consuming is easily formed, and it is very difficult to break off. For the first five or six days its consumption causes violent intoxication. If consumption is stopped, the individual loses appetite, gets indigestion, fever, etc., and dies. There is a tendency to go from moderation to excess and to increase the quantity consumed.

32. There are no social customs known. It is consumed on festival days. There is no religious custom with which it is associated or to which it is essential.

33. The consumption is not regarded as a respectable accomplishment; rather it is regarded as a bad habit as producing intoxication. The habit is generally confined to the lower orders. If a stray plant is found anywhere, consumers, it is said, make obeisance. It is given to fakirs as a mark of respect. Habitual consumers are said to burn frankincense before a plant found unexpectedly.

34. As the consumers are generally poor people who cannot afford to buy liquors, it will be a serious privation to make them forego the habit of consumption, as it is difficult to give up the practice. In the Trichinopoly taluk there are reported to be about 1,000 persons who smoke ganja and eat bhang. In the Kulitalai shop there are from 40 to 50 customers a day. The figures are of course not accurate, but the number of consumers is undoubtedly very small compared with the number of those who use alcohol.

35. It would not be feasible to enforce a prohibition of the consumption of so easily carried a drug, even if it were desirable. There is no doubt that the drug would be illicitly consumed. The prohibition would cause discontent, but not here, probably political danger. I think there would be very probably a desire to have recourse to alcoholic stimulants, but I do not know enough of the effects of the drug, to say certainly.

36. The number of consumers of these drugs being small, and there being but little accurate information of the amount actually consumed, no general statement can be made. I know of no instance of a ganja smoker giving up ganja and taking to liquor.

37. No information.

38. No round ganja here. Flat ganja has more intoxicating effect than chur.

39. Smoking is said to be preferred, as being less injurious than eating or drinking; but the Head Assistant Collector reports that it is considered to be more exciting.

40. It is mixed with other drugs by native doctors and used for diarrhoea, dyspepsia, etc. None of the drugs is said to be used in the treatment of cattle disease.

41. (a) Yes, so it is said.

(b) It is used for this purpose.

(c) Yes, but when drunk it is said not to be effective.

(d) It is said to prevent illness due to change of water.

42. The prevailing opinion is that a moderate use of the drugs is harmless, but the question is one for medical men to answer.

43. Yes.

44. According to consumers, it is refreshing and slightly intoxicating. Does not allay hunger but creates appetite. The effect lasts from three to six hours. The after-effect is said to be a feeling of weakness, unless the dose is repeated, but not to the same extent as in the case of opium eating. If the dose is not repeated, headache, loss of appetite, indigestion, looseness of bowels, etc., are said to follow. Its use is said to produce a religious frame of mind.

45. I have no satisfactory information. Some consumers stated to the Head Assistant Collector that, as long as the consumer has sufficient nourishment, no ill-effects follow. But if food is insufficient insanity may follow. I know of no case.

46. Habitual excess is no doubt injurious, but what are the precise effects I cannot say.

47 and 48. Consumers say that it is not hereditary and does not affect children.

49. Not so far as I know.

51. Yes. Most of our bad characters are not habitual consumers. So far as I can ascertain, there is no traceable connection between the use of ganja and crime here. The General Deputy Collector remarks that poor consumers may commit theft to provide themselves with means to procure the drugs they require.

53. Not so far as I am aware. I know of no case here.

54. No.

55. A case is reported to have occurred at Tuvankurichi in Marungapuri zamindari, Kulitalai taluk. A man used to visit the *bandy* stand, throw ganja into the pots in which rice was cooking, and afterwards rob the *bandy* men. Complete stupefaction can be produced. The dhatura is generally preferred to ganja by criminals for stupefying victims.

58. The sale of hemp drugs is restricted to licensed shops, but there are no other restrictions, and there cannot, therefore, be said to be much of a system at all. No one will deny that the system is capable of improvement in the sense that it is not ideally perfect; so far as it goes it works well enough, but cannot do much to regulate or control consumption.

60. Ganja not produced in this district.

61. Charas also is not produced in this district.

62. No cultivation in this district.

63. I have no improvements to suggest in the method of regulating the sale of drugs so long as the manufacture and transport are left unrestricted.

64. There are none.

65. (a) No differences made.

(b) The only taxation is the license fee paid by shopkeepers and the ordinary land tax paid by growers. It is not proportionate to the taxation on opium, but it would not be at present practicable to equalise them.

68. Shops are not licensed for consumption on the premises.

69. As the shops are not licensed for consumption on the premises, they do not affect the locality in which they are situated any more than a shop for the sale of any other commodity. It is not usual to consult the people before fixing on sites, but any objection received would be considered.

70. No.

Oral evidence.

Question 1.—I am ten years' service. I have only held charge of a Collectorate for four months. As Sub-Collector I have had to do with excise arrangements. The subject of the hemp drugs has never attracted my attention.

Question 58.—I have not formed any opinion

as to the propriety of further restricting or controlling the consumption of the drug. It is not much used in this part of the country. The shopkeeper's accounts furnish the only statistics of consumption. The hemp drug shops are auctioned, and are distinct from the opium shops. The revenue of Madura district, derived principally from the shops in the town, is about Rs. 4,000.

19. Evidence of Mr. K. C. MANAVEDAN RAJA, Collector, Anantapur.

1. My personal experience in the matter is *nil*, but the information hereunder given is a compilation of that obtained from the district officials and local enquiry.

2. I think this definition may, on the whole, be accepted. Charas.—This is not known here by this distinctive name. Ganja is the preparation from the flower and leaves of the hemp plant, male and female. Varieties of ganja.—Though they are to be found here and there, they are hardly recognized as such distinctively in connection with use as a narcotic.

3. It rarely grows spontaneously extensively, but it is found in old fort ditches and in some back-yards and vegetable gardens in this district. One of my Deputy Collectors, who belongs to the Northern Circars, states that the plant grows spontaneously in the hill tracts of Ganjam and Vizagapatam and to some extent in the Reamp side in the Godavari district.

4. In this district the plant is known by the general name of ganja.

5. The hemp plant is found to grow well in rich soil and where there is good moisture.

6. Scattered.

7. (a) It is cultivated to a very small extent for private consumption for narcotic purposes included in the general term ganja.

For (a) in Anantapur, Yadiki, and Madak-sira, and to a lesser extent for (d).

8. The increase or decrease in cultivation is practically inappreciable.

9. It is grown in many respects under conditions similar to garden crops, and thrives in the same manner. With a view to increase its narcotic properties, it is said that the plant when sufficiently hardy is given a twist.

10. No special classes cultivate the plant, nor is its use confined to such.

11. Very rarely in this district.

12. As stated, the cultivation is little and scattered about in this district.

13. The cultivation is not restricted to this district. It is grown more or less everywhere where there is good fertile soil and water facilities.

14. Preparations of the hemp plant under the general term ganja are prepared by consumers, the consumers being not large.

15. No distinction is made between (a) cultivated and (b) wild hemp.

A. Ganja is taken from the pod by removing the seeds, and rubbing it with water or milk in the palm of the left hand with the thumb of the right hand several times until it acquires a certain consistency, and then it is smoked, and sometimes tobacco is added.

B. Ganja known by the name of majum is prepared in the shape of confection mixed with sugar-candy, almonds, and spices, and made into flat cakes, and are sold in sweetmeat bazars. Bhang solid is made in the shape of halwa mixed with similar ingredients, and the mixture is allowed to dry and made into balls.

C. For drinking purposes, sherbet, almond juice, milk, raisins and cardamom, boiled and then added to bhang.

16. Bhang is prepared in houses and also in bazars. It can be prepared from hemp plant wherever grown. Ganja can be prepared wherever the plant is grown, but not so charas, which is not prepared in these parts.

17. Generally by consumers: these are fakirs, dasaries, lingayats, boyas, and weavers. Majum prepared by sweetmeat sellers.

18. Solid bhang (halwa) is said to last only for about a fortnight or almost a month; after that time it is said to lose its intoxicating properties. Liquid bhang is taken as soon as made, and utmost not kept more than two or three days. Ganja lasts for about a year without much deterioration. The reason given is that ganja is natural leaf, the others artificial mixtures.

Trade.

Year.	No. of ganja shops.	Revenue.
1891-92 . . .	5 . . .	628
1892-93 . . .	4 . . .	292
1893-94 . . .	3 . . .	176

Number of tolas consumed in 1892-93 . . . 21,173
Average selling price per tola in 1892-93 . . . 4 pies.

19. Ganja is used generally only for smoking, but there is a rare practice of adding a little of the flower to meat curry (charas not used at all).

20. The confirmed habit of smoking ganja would appear to have been introduced by fakirs, bairagis, and others from Upper India as they pass through this district, so that only a small percentage of the population are addicted to the practice of smoking ganja. The localities where the habit of smoking ganja are for the most part along the main arteries of communication by road and rail.

21. Round ganja is preferred, it being the imported one, to flat, the former being more intoxicating. Flat ganja is also used.

22. Charas is not known and used.

23. Bhang is not used for smoking.

24. Fakirs, dasaries, lingayats, boyas, weavers,

and marvadies are said to both eat and drink bhang, but it is drunk more often in assemblies of fakirs and by Rajputs.

25. Ganja is easily had under present conditions. The habit does not appear to be spreading. Its use is not going out, as licenses to sell ganja are being taken out from year to year.

26. In this district habitual excessive consumers would seem to be few and far between, though habitual and occasional moderate consumers may sometimes be said to become excessive consumers.

27. Habitual and occasional smokers are found in the same classes; habits of life generally sedentary.

28. (a) Habitual moderate consumers consume about a tola per day, worth 3 or 4 pies per tola.

(b) Habitual excessive, double the quantity, i.e., 6 or 8 pies.

29. (a) Tobacco is mixed.

(b) Exceptionally opium, while sweets and spices are also often mixed to give the whole flavour, taste and appetite. Dhatura exceptionally mixed. The consumption of bhang not being universal in this district, the demand for bhang massala is not such as to create a supply regularly offered for sale. The ingredients are ginger, sugarcandy, opium seeds (cuscus), black pepper.

30. The consumption is generally in company and confined to the male sex without regard to limit of age after boyhood. It is occasionally given to infants to induce sleep.

31. The habit with other habits of the kind is easily formed; if not deep-rooted is easily broken off. There is, however, a tendency to develop moderate use of the drug into excessive.

32. There are no particular social or religious customs in regard to consumption of the drug in this district, so that it is not possible to judge exactly whether the use is temperate or excessive, or leading to formation of habit. But there is no doubt that the example is injurious in the sense of its turning out into a vice.

33. Public opinion is not very critical in regard to the consumption of the drug, though the exhibition of persons being known as confirmed ganja users is avoided and not relished. The apparent disrepute of being known as using the narcotic is owing to the evil results of the excessive use thereof. Consumers of the drug from Upper India often invoke the divinity just before taking the drug, as well also opium, in the belief that they possess wholesome properties calling for being approached at with meek and humble heart.

34. It is thought that it would be rather a serious privation not to use the drug when there is craving for it, occasioned both by moderate and excessive use. There is no means of ascertaining the numbers of each class.

35. It would be feasible to prohibit the use of the drug, but in such case illicit consumption cannot be totally prevented, as it would be impossible to reach every illicit instance of use, the use being so easy. The prohibition can only be enforced by interdicting its cultivation. As the drug is used as an intoxicant, it would be quite impossible to prohibit its use accordingly. The method of prohibition would be to tax the cultivation. The total prohibition of the use of the drug my Treasury Deputy Collector, who knows something of Upper India, says would occasion serious political discontent, leading possibly also to a political danger.

(a) The Hindu of the tropics has taken to alcohol as only an acquired habit which he can easily shake off, while the use of the drug in question, as with opium, is indigenous, so that it is believed if the consumption of the hemp drug is totally prohibited, he will take more to opium than to alcohol.

36 No.

37. Charas is unknown in this district.

38. It is not possible with the information at hand to detect the difference.

39. Opinion is varied in the matter, some stating smoking is less injurious, others eating and drinking less injurious.

40. It is said that these drugs are prepared as a stimulant for asthma, fever, dysentery, and externally for colic. Yes, in some parts it is used for cattle disease and given to cows for safe delivery. Ganja leaves given to calves; also is burnt to disinfect sheepfold.

41. Charas is not used in these parts. Ganja and bhang used for (a) yes, (b) yes, (c) yes, (d) steady the mind it is said. What is referred to is the moderate occasional and habitual use.

42. The moderate use of it is not felt to be harmful, provided good nourishment is taken. That is the experience.

43. Inoffensive.

44. Yes; it is refreshing; it produces a little intoxication. It allays hunger only for the time being, but without the same effect on the system as food proper. It creates appetite after the stimulation has diminished. It lasts for four or five hours. After-effects are that the consumer finds himself not quite so equal for any great task as he was when the stimulation existed. Want of subsequent gratification produces uneasiness.

45. (a) Generally impairs the constitution if no proper nourishment is taken.

(b) No.

(c) Prone to cause lung affections and in the end dropsy.

(d) No.

(f) Ganja smoking might bring on insanity, at times violent, but generally consisting of delusion generally connected with religious subjects, generally permanent, no particular typical symptoms.

(g) The drug is taken to relieve mental anxiety or brain disease, and there is tendency to go to excess and produce insanity.

46. The same remarks apply more so, and the constitution gets impaired for want of sufficient nourishment owing to the appetite being comparatively deadened by the excessive use of the drug.

47. No; the children must be in a degree affected.

48. It is believed that owing to the habit being contagious, it may become hereditary and affect also the children.

49. (a) Yes, by young people.

(b) Generally not.

(c) Generally more injurious, because the consumers are younger and it will have more effect on their constitution, and in these cases there is a greater tendency to go to excess.

Opinions differ on the last point.

50. In excessive use it is not used as an aphrodisiac but simply as narcotic. It is said to produce impotence.

51. (a) No.
 (b) Perhaps large proportion of gamblers may be consumers.
53. May; it is not unlikely that the indulgence may occasionally induce violent and other crime. An instance is quoted locally wherein a person who indulged in the drug beat a person, resulting in death, on slight provocation.
54. The general opinion is in the negative.
55. (a) Yes. (b) Yes, for a time.
56. Admixture of tobacco with ganja and sweetmeats with halwa modify intoxicating power.
57. Charas is not used in this district. Ganja in moderate use is said to be stimulating. In excessive doses it is narcotic.
58. Capable of improvement.
59. The present system in this district is to put up to auction sale the right to vend the drug. Under this system there are three shops for sale of the drug in the district. It seems to me that the right to sell in places such as the head quarters of each taluk and division of Deputy Tahsildars may be put up to auction. I think that while the sale will bring in revenue, it will not operate as a hardship to the consumers.
60. The cultivation is not controlled. Whether this system requires to be modified will depend

whether the use of ganja is bad to health, and, if it is not, on the consideration whether revenue should not be derived from the narcotic (as from other narcotics).

61. No charas is produced here.
62. Same answer as 60.
63. No objection, except that a source of revenue is not availed of by selling the right of vend in many more sub-divided localities than at present.
64. The article being a local product, no remarks to offer.
65. At present the rate of vending the drug is sold by auction and there is no other tax. I have no remarks to offer as to (b), nor as to any alteration in the amount of taxation of any of the articles in relation to each other.
66. Not necessary.
67. No remarks.
68. At present it is consumed without reference to any locality. No restriction in regard to this seems at present necessary.
69. The wishes of the people are not consulted, and I do not think it is necessary to do so unless the opening of shop restricts the supply or raises the price.
70. No remarks.

20. *Evidence of MR. C. J. WEIR,* Acting Collector, District Magistrate, and Agent to Govr., Ganjam.*

1. The definitions may be accepted, but charas is not used in this district.
2. Bhang is known locally as patti and ganja as kalli. The liquid decoction from patti is known as bhang.
- 3 to 6. I understand that the wild hemp plant is not found in this district. The District Forest Officer has, however, been specially asked for a report on the subject.
7. It is cultivated throughout the district for all purposes, except the production of charas. Its production for fibre is very limited. A special report as to the area under cultivation is being compiled.
8. I am unable as yet to say; but there is a general impression that there has been an increase in the consumption of drugs prepared from the plant, and a consequent increase in the area cultivated therewith.
9. The system is fully described in several of the replies I am forwarding with this. I have nothing to add.
10. The ordinary cultivators raise it.
- 11 and 12. I do not know.
13. It is not restricted. On elevated situations. Moderate rainfall and red soils well manured are deemed the most favourable conditions. I am unable to say that it would not grow anywhere.
14. (a) and (c) are. No statistics can be given, as they are largely prepared in private houses.
15. I have no personal experience. Full details are, however, given in some of the replies sent herewith.
16. (a) Yes.
 (b) I believe so.
 (c) Not known.

17. The preparation is not restricted to any particular class.
18. Ganja keeps for one year or more and bhang a much shorter time. Mildew and damp are said to be the causes of deterioration. Sun-drying is adopted.
19. Ganja is mixed up with many other kinds of spices and eaten.
20. Ganja is smoked almost universally by bairagis and religious mendicants in all localities. Amongst other classes the practice prevails; but I have had the most varying estimates given of the percentage of the population who smoke. It is probably not very large, *i.e.*, not over 5 per cent.
21. Flat ganja.
23. Very rarely, and only on account of its cheapness.
24. *Vide* answer to question No. 20. As far as I can learn, drinking of bhang is most generally practised, and the custom is more general than that of smoking ganja. It is not confined to any class or locality, but more prevalent in the malarious parts of the district.
25. It is the general impression in the district that it is on the increase. Many attribute this to the enhanced price of intoxicating liquors owing to the increased stringency of our abkari laws. I think, if the fact be true, the explanation is reasonable.
26. I cannot say.
27. Religious medicants. It is generally said other consumers belong mainly to the lower classes, but some of all classes unquestionably indulge. Drugs are taken as prophylactics to malaria, and in a feverish district like this the belief may bring many to indulge in the habit.

* Summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

28. Widely varying estimates are given, but apparently an excessive consumer can satisfy himself with about one anna's worth in the day.

29. Details will be found in many of the answers appended. The object of admixture is apparently generally to increase the intoxicating effect or to make the drug more palatable.

30. No rule that I can ascertain. It is mainly confined to the male sex. Children do not usually consume the drug.

31. I believe so. It is, I understand, difficult. Yes; this is the general belief.

32. On two particular occasions it is said to be customary to consume bhang. The consumption is said to be moderate on such occasions, and is not essential to the worship. I consider such a custom is more or less likely to lead to the formation of the habit.

33. The use of ganja seems to be universally regarded with disapproval. That of bhang, especially on certain occasions, less so. But the habitual consumption of all forms of the drug is in disrepute, and consumers, as a rule, endeavour to conceal the habit. The evils resulting from excess in its use, and the fact that it is generally used as an aphrodisiac, may account for the sentiment against it. I believe the plant is not worshipped by any of the natives of the district.

34. I have no doubt it would to all habitual consumers. I cannot give numbers.

35. In my opinion it would not be feasible. I believe it would be illicitly consumed. It would be practically impossible to enforce prohibition. It might, of course, be practicable with a very large staff to stamp out to a large extent the production of the drug; but this would involve the evils which attend all such attempts in this country. I believe the prohibition would cause severe discontent among consumers. I do not think that in this district it would amount to a political danger.

36. I have no doubt that prohibition would be followed by recourse to another form of intoxicant. This is, I believe, the result of prohibition always when another intoxicant is available. The tendency is, I understand, in the other direction.

39. The bulk of opinion in this district is to the effect that drinking bhang is the least injurious and is sometimes even beneficial.

40. (a) Yes.

(b) Yes.

41. It is generally believed to be of benefit in (a), (b), and (c).

43. Yes.

44. These are described by the medical officers who have sent in their replies.

45. In my experience as a magistrate, I have on several occasions had lunatics brought before

me and their insanity has been ascribed to the use of hemp drugs. In one case, which came particularly under my observation, the lunatic recovered very shortly after he was placed in confinement. I cannot say if the lunatics were habitual moderate consumers or excessive consumers.

49. It is widely believed to be an aphrodisiac. The preparations of ganja seem to be in most repute in this connection.

51 and 52. I do not consider there are sufficient grounds for saying that there is any connection in this district of the moderate use of the drug with crime either particular or general. Excess in any intoxicant is likely to lead to crime.

53. No such case has come under my experience.

54. I do not know.

56. I have no information on the point.

58 *et seq.* The present system of excise administration in respect to these drugs is, I understand, more or less tentative. It is only within the past few years the Abkari Department has dealt with these drugs at all, and at present our connection is limited to the licensing of shops for the sale of the drugs. It is only since the introduction of the system that it has become possible to form any estimate of the extent of consumption. I consider that there would be very great and serious difficulties in the way of any attempt to restrict the production of a drug so easily and widely produced. Hemp drugs are, however, in my opinion, and I believe in that of the majority of natives, the most pernicious form of intoxicant, and the danger of increased use is the greater, as there is no recognised rule of caste prohibiting it.

Government should, I think, in connection with its declared policy to enhance the price of alcoholic and other intoxicants, consider the danger of thereby driving consumers thereof to the cheaper and more dangerous preparations of the hemp drug.

68. I think it is undesirable that shops should be licensed for consumption of the drug on the premises.

69. Enquiries are made before a shop is opened whether there are a large number of consumers or not in this locality. The demand for the drug is gauged roughly by the amount offered for the privilege of exclusive vend. If the amount offered is small, shops are not licensed. In very few places would there be any public opinion on the subject.

70. I have no information.

21. Evidence of MR. H. D. TAYLOR, Manager, Jeypore Estate.

Oral evidence.

Question 1.—I have been eight years in the Civil Service. I have been seven and quarter years in Jeypore, the last four years as Manager. I spend almost the whole time in camp. For the last four years I have had nothing to do with the Government revenue, only the Jeypore estate revenue.

Question 59.—I have never seen any cultivation

of hemp, not any patch cultivation outside back yards. That is a few plants in a back garden is the extent of cultivation. No notice is taken of such cultivation. We are under Act III of 1864 in Jeypore. There is no control then over the cultivation, sale or manufacture of hemp drugs. No revenue is raised from hemp. The people who

grow it, may sell it where they like. I believe that the true hill raiyats do not smoke the drug or use it for drinking, but only for medicine. I have never heard of a cultivator so using it in the small villages. The drug may be so used in the towns like Jeypore, but I have made no inquiry, not knowing that I was to be examined. I have never seen the drug sold in the markets. It may be sold at Maidapur or elsewhere. There is nothing to prevent such a sale, but I have no experience of such sales. The drugs are mainly used by foreigners. The hill raiyats keep Shivaratri. I have heard a general rumour that ganja is smoked in Jeypore, but I understand it is not smoked in the villages. I have generally understood that it is consumed by loafers, idlers, and such people in Jeypore and other large towns. I have never seen any ganja going across the border. I have never conducted any inquiry into the matter of smuggling across to the Central Provinces. The matter has never been brought to my notice. During the last four years I have had nothing to do with the Government Excise revenue.

As I know nothing of the use of the drugs among the people generally, I know nothing of their effects among the people generally.

I remember a foreigner, an Uriya Brahmin, a schoolmaster in a village, going mad about four years ago. As he was a schoolmaster, I inquired of the villagers (he had, as far as I remember, no relatives with him) why he had gone mad, and they said he smoked ganja. I knew nothing of his past history, and accepted that; and, as far as I remember, I entered ganja in form C as the cause of insanity. I sent the man to the asylum at Waltair as Magistrate. I heard recently of his being back in another school again. I think he has been back some time. I do not know whether it might not be madak that this man smoked. There is a great deal of opium smoked and the people do not discriminate. Village people are very ready to attribute insanity to ganja in Jeypore. I have heard of lunacy being attributed thus to ganja; but I am unable to recall any other cases. When I sent this schoolmaster to the civil apothecary at Korapat, as far as I remember, I told him that the supposed cause was ganja. I should not as a Magistrate inquire into such cases personally as a rule, but receive report from the police, and examine any witnesses the police brought up. In this case I went to the village to inspect the school. I do not think any ganja was grown in the village;

but a good deal of opium was consumed. This is the only ganja case I remember. I have had other lunacy cases, but all this has been more than four years ago, when I was a Magistrate.

In view of what I have said regarding the use of the drugs among the general mass of the people, there is no need for restriction. But neither, so far as I know, would any privation be caused if restriction were necessary in the interests of other provinces. I have not inquired as to whether the people use the drugs in their feasts. There would certainly be no privation involved in the prohibition of export. And, so far as I know, there would be no privation of a general character involved in the prohibition of the use of the drugs in Jeypore estate above the Ghats which is under my charge. I think that the introduction of the Government system of licensing sale would meet with no opposition from the people in the estate generally. It would only affect at all such places as the town of Jeypore. It would, however, be the best plan in regard to such towns. If opium arrangements were altered, there might be a greater demand for ganja, and this might alter the conditions of the problem. I would recommend the Government system being introduced experimentally by opening a shop in Jeypore. I think there would be great difficulty in interfering with the present growth of hemp. It would require an expensive preventive agency. I do not know certainly whether this little cultivation is carried on with a view to using the drug or to making profit by selling it. I have seen one or two plants of wild hemp in the estate.

I have not hitherto discriminated between the excessive and moderate use of ganja as a cause of insanity. But I should certainly inquire into the extent of the use if it could be ascertained. It would be very difficult to get any definite information as to this. If ganja were mentioned, I should still make the prescribed inquiry regarding other causes, as shown in the form C, going back for a period of two years which (as far as I remember) is prescribed. I believe that people often take to ganja (as to drink) when they have heavy losses; and the two causes might combine. My own impression is that ganja might very well be a cause of insanity. I base this on general report. I should not therefore employ a man in estate service of whom I knew that he used the drug at all. I could not with confidence put such a man on important guard duty lest he became incapable. I should not have the same feeling about the moderate consumption of liquor.

22. Evidence of MR. J. G. D. PARTRIDGE, Assistant Collector, Ganjam.

1. Information has been specially gathered for this purpose from some medical officers and traders in these drugs. Also my position as Divisional Officer.

2. Yes. Bhang, as defined above, is locally called patri. What is locally known as bhang is a liquid mixture consisting of milk, hemp leaves or ganja, and some spices.

3. In no district I am aware of does this plant grow abundantly.

4. Trisuli, basavapatri, etc. Yes.

5. Good soil containing manure is necessary for the growth of the plant. Much rain spoils the plant.

6. No definite information.

7. (a), (c), (d) Yes.

In this district it is cultivated in backyards of houses and in fields, also in some villages. To a slight extent; but definite information will follow on the receipt of reports from Taluk officers.

8. There may have been some decrease after the introduction of the Madras Alkali Act, 1 of 1886; but I have no definite information on the point.

9. A well-manured plot of ground is selected for sowing seeds, which is generally done in June. When the plants grow to a cubit's height, the male ones are singled out and extirpated, and the female plants are transplanted, generally in the

months of July and August. When the plants are full grown, they are reaped generally in January and February. Manure and water are necessary.

10. No.

11. No, as far as am I aware of.

13. There is no difference in the mode of cultivating hemp required for producing ganja or for other purposes, according to my information.

14. (a), (c) Yes. Both to a small extent in this district.

16. Prepared by some in their houses and others in temples. It is not prepared from the wild plant in this division.

17. By the licensed vendors and habitual consumers, who are not restricted to any particular class.

18. Ganja and bhang deteriorate by keeping. Ganja keeps good for about a year with ordinary care. Afterwards it deteriorates becoming quite dry as dust and losing its resinous matter. It may also be attacked by insects. Patti can be kept only for five or six months. It afterwards gets decomposed.

19. Ganja is not only used for smoking, but also employed in the preparation of several intoxicating drugs, such as majum, halwa.

20. Bairagis and fakirs for the most part. The proportion of ganja smokers to the total population would be very small in these parts.

21. Only fat ganja is used in this division.

29. The ingredient ordinarily used with ganja for smoking is tobacco, and those exceptionally mixed are sandalwood powder, musk, and opium. For drinking purposes pepper is ordinarily mixed; and cloves, cardamoms, nutmegs, cinnamon, and various other spices are exceptionally used. Dhatura is used both in smoking and drinking to increase intoxication.

30. Though these are for the most part used by adult males, very small quantities may be used by females.

31. The habit is easily formed and difficult to break off. There is a tendency for the moderate habit to develop into the excessive.

32. Bondilis use bhang (liquid) at the time of the Holi festival. It is also said to be used on Mesha Sankraman day in Parlakimedi Taluk.

33. The consumption of these drugs is regarded with contempt, although it cannot be said that there is any public opinion on the point. Every object which causes intoxication is generally held in disrepute by the Hindus; more so ganja, as it is supposed to cause derangement of the brain.

35. (a) No.

(b) Yes.

The prohibition would cause great discontent among the consumers, though it will not amount to a political danger in these parts. The prohibition will no doubt be followed by recourse to liquor and other intoxicating drugs.

40. Yes.

43. Yes.

44. Produces intoxication and allays hunger.

45. (b) Yes.

(c) Yes.

(f) Yes; insanity is caused in exceptional cases. Temporary. Yes. Lately a person who was rendered insane by the frequent use of ganja was produced before me. Enquiry showed that the cause of insanity was ganja, and he was a person to be detained in a lunatic asylum for treatment. The insanity was, however, of a temporary nature, as a few days' restraint resulted in a perceptible improvement in his state of mind.

58. The preparations from the hemp plant are consumed to so small an extent in these parts that I do not consider that any changes in the present system of excise administration are called for in this district.

60. There is no control at all in this presidency on the cultivation of the hemp plant.

68. Not in the Ganjam district, as far as I am aware of.

69. Enquiries are made as to whether there is any necessity for a shop at the place in question. No persons raise objections to the opening of a shop. There is only one shop in a fairly large town like Parlakimedi with over sixteen thousand inhabitants.

People living in villages do not require a shop as they can grow the plant.

23. Evidence of MR. R. H. CAMPBELL, Acting Sub-Collector, Guntoor.

1. I have had no personal experience regarding the matters connected with hemp drugs, and can only give information which I have collected officially.

2. The hemp products are known under different names—ganja, bhang, majum, madad, halwa, sak-karao, etc. These names are probably local synonyms for one or other of the three main preparations under which the hemp drugs are classified in the second question, viz., ganja, bhang, and majum. Ganja is generally prepared from the dried leaves of hemp plant, which are reduced to powder by being rubbed on the palm of one hand with the thumb of the other hand. It is then mixed with small proportion of cut tobacco, and the mixture is put in a chillum or pipe and smoked. Bhang is prepared by grinding the dried leaves of the male plant and mixing the powder with water and sugar, a little milk being some-

times added to increase the flavour. It is then used as a stimulating drink. To make it more intoxicating the seeds of the dhatura (stramonium seed) are sometimes mixed with it. Majum is prepared by soaking the hemp flower in water or coconut milk and boiling it in milk. The mixture is boiled down till it gets sufficiently dry to make a sweetmeat out of it by adding sugar and spices. Charas is not generally known in this part of the country. It is said that it is prepared by mixing the resinous exudation from the leaves and flowers of the hemp plant with tobacco.

3. I am not aware of any spontaneous growth of the hemp plant.

4. The hemp plant is known in this part of the country by the name of ganja tree. The other appellations for Indian hemp, or *Cannabis indica*, are bhanga, ganjika, bijiya (seeds), bhang (Hindu); ganjar; beng, ganja, tam, Mala

Peninsula; isjeeroo, consjaina (Mal) kinnab (Arab), and Bin (Burma).

5 and 6. *Vide* my answer to question 3.

7. Cultivation of the hemp plant is carried on in parts of this division, chiefly in Duggupadu and Pusapadoo, Bapatla taluk—

- (a) for production of ganja;
- (b) for use as bhang;
- (c) for its seeds, and perhaps for fibre. The seeds are said to be occasionally used for feeding milk cows.

Information as to the extent of cultivation in the taluks of the division is not available, except for Bapatla taluk, where it is reported to be as follows:—

F. 1298	.	.	. Ac. 346—5—2
F. 1299	.	.	. Ac. 170—21—0
F. 1300	.	.	. Ac. 176—63
F. 1301 (famine year).			No cultivation.
F. 1302	.	.	. Ac. 101—37

8. As far as Bapatla taluk is concerned, the figures given above seem to indicate that the area under hemp cultivation is gradually decreasing. But I am inclined to think that these figures are not reliable. Prior to 1889, the cultivation of the hemp plant and preparation of drugs from ganja had not been regulated by any system of rules laid down by the Government. In 1889, the provisions of the Abkari Act relating to the retail vend of hemp drugs were brought into force, no restrictions being, however, imposed upon the cultivation of the plant or the possession of preparation made from the same. In the first year of the enforcement of these provisions, ganja shops were licensed on payment of an annual fee of Rs. 15. In the next year (1890), the license fee was enhanced to Rs. 30. In 1890, the fixed licensed fee system was replaced by the auction system, which still continues. Though the revenue is comparatively small, yet it has been rapidly increasing year after year. One fact has become patent from the results of the last three years' auction sales, and that is, that there is very keen competition for the privilege of vend, and that people are prepared to offer large sums for the monopoly of it. This shows that there is a possibility of large future developments in the trade in hemp drugs, and the hypothesis that the cultivated area is gradually decreasing must necessarily be wrong.

9. It is said that the hemp plant is cultivated like the chilly seed. Beds are first formed and the seedlings transplanted after they attain a certain height.

10. The raiyats who cultivate hemp do not constitute a special class. The ordinary agricultural cultivators grow the plants partly for domestic use and partly for sale to retail dealers.

11. The practice of growing the plants from the seed of the wild hemp does not seem to obtain here.

12. No information is available.

13. No restrictions have been placed in this presidency upon the growth of the hemp plant. The enquiries instituted by the Board through the Collectors in 1887 have elicited the information that the plant is cultivated in most districts of the presidency only in the back-yards of houses for domestic use, and that it is grown extensively only in the districts of Godavari, Cuddapah, Kurnool, North Arcot, South Arcot, Tinnevely and Kistna.

14. Ganja and bhang are prepared in parts of this division. Ganja shops in the following places in this division have been sold this year by public

auction:—(i) Guntoor town, two shops, (ii) Mangolagiri, one shop, (iii) Seetangaram, one shop, (iv) Sattinapalli, one shop, (v) Daggupadu, one shop.

It is said that charas is a preparation peculiar to Northern India and is not used.

15. *Vide* reply to question 2. Ganja is generally used for smoking and bhang for drinking purposes.

16. It appears that bhang consumers generally prepare the drink in their houses. A knowledge of preparation of hemp drugs is limited to towns and surrounding parts. It cannot, therefore, be said that bhang is prepared from the hemp plant wherever it is grown. I am not aware whether ganja or charas is also prepared from the wild plant.

17. Ganja and bhang are generally prepared by the consumers themselves. Majum and alwa used to be prepared by the sweetmeat makers; but since the introduction of the license fee and auction systems in regard to the retail vend of hemp preparations, they are prepared and sold by licensed persons. The preparation of hemp drugs is not restricted to any special classes of the people.

18. I have no definite information on these points. I believe the drugs deteriorate by keeping.

Trade.—The Tahsildar of Bapatla reports that the quantity of ganja received and retailed in 1892-93 is as shown below:—

	Seers.	Tolas.
Quantity received	810	21
Do. retailed	698	15

According to the Tahsildar of Guntoor, the following quantities of ganja were received in his taluk during 1892-93 and 1893-94:—

	Quantity received.
1892-93	Mauuds 102 35 seers,
1893-94	„ 270 nil,

of which 78 mauuds were transported to other taluks.

As noticed above, no record is maintained under existing orders of the quantities received and retailed, and absolute reliance cannot be placed on the above figures.

19. The most common use made of ganja is for smoking. It is also used in making other hemp preparations, such as majum, alwa, etc.

20. The chief consumers of ganja seem to be wandering fakirs, bairagis, and bavajis, and people from the north of India. People belonging to the lower classes, who are addicted to the use of intoxicants generally, also smoke ganja. Among Muhammadans are often ganja smokers.

21. Flat ganja is said to be generally used for smoking in these parts.

22. No information is available.

23. The common notion prevalent about bhang is that it is a drink and is not used for smoking.

24. *Vide* reply to question 20.

25. The ganja dealers say that the use of ganja and bhang and other hemp drugs is on the decrease since the time that the traffic in intoxicating drugs has been brought under regulation; but this statement is incompatible with the results of sales of the privilege of vend, which show a marked increase in the revenue year after year. In the absence of accurate information as to the extent of cultivation of the plant and consumption of the drugs, no reliable conclusions can be drawn, at least so far as this presidency is concerned.

26. I should say that a large proportion of the

consumers are habitual moderate consumers. Any proportions that could be given as obtaining between the several classes of consumers would be merely conjectural and not at all reliable.

27. The consumers are not dangerous to society. The wandering fakirs and bairagis are said to smoke ganja to secure concentration of mind in their devotional practices, and to serve as a temporary antidote against hunger. Athletes are said to use bhang to serve as a stimulant while they are engaged in wrestling and other exercises.

28. Smoking ganja is sold at three or four pies a tola, and a tola or tola-and-half may suffice a moderate consumer or even two. One seer of bhang properly prepared will cost three or four annas, and will be enough for two men to drink. One seer of majum may cost as much as a rupee and will do for 10 men.

29. The ganja procurable in the local markets is, I understand, adulterated ordinarily to increase its weight, and exceptionally to intensify its intoxicating power. It is difficult to obtain the pure drug. Among the deleterious substances mixed with ganja may be mentioned opium, stramonium seed (dhatura), aconite or monk's hood and nux vomica, each of which is in itself a strong poison, except when used in very small doses. The seeds of dhatura are known to be used in intensifying the narcotic effects of bhang and in adding to the strength of country spirits and toddy.

30. The consumption of ganja and bhang is practised in company; oftener in the case of the former than in that of the latter. Majum and other strong intoxicants are generally consumed in solitude or in the company of the habitual consumers. Children do not use these drugs.

31. The habit is easily formed, and, when once formed, is difficult to break off. As far as I know, there is no particular tendency for the moderate habit to develop into the excessive. If anything, alcoholic liquors and hemp drugs are much on a par in this respect.

32. I am not acquainted with any such social or religious customs.

33. Ganja smokers are not generally looked down upon as much as consumers of majum and other strong preparations. The consumption of the latter drugs is associated with licentious habits. The higher castes of the Hindu religion condemn the use of all intoxicants. A habitual ganja smoker or consumer is not generally respected, but suffers social degradation. No harm is, however, thought of a bairagi or fakir who consumes the drug on the ground of religious devotion. The custom of worshipping the hemp plant does not obtain here.

34. It would, in my opinion, be a serious privation to the consumers to forego the use of the drug which they have so long been accustomed to. Any attempt to stop the use of hemp drugs by prohibitory duty or by means of executive order would only drive the people to illicit consumption or to the use of still more deleterious drugs, as the habit of indulgence in stimulants, when once formed, will be persisted in in spite of all repressive measures.

35. The absolute prohibition of the consumption of ganja could not, in my opinion, be enforced. To prohibit its consumption absolutely, its cultivation should in the first instance be put a stop to, and this does not seem feasible. The practice of growing the plant in back-yards and

in vegetable gardens has long been prevalent. For any person addicted to the habit of ganja, nothing would be easier than to grow a few plants secretly within the enclosure or compound of his own house, in nooks and corners, or in the midst of other vegetables. To effectually prevent the cultivation of the plant, nothing short of a large preventive establishment working by the most inquisitorial methods would be required. Moreover, it seems to be very little use preventing the cultivation of the hemp plant, for the reason that India abounds with plants growing wild everywhere from which drugs can be prepared far more deleterious in their effects than even ganja. If the cultivation of the hemp plant is put a stop to, the ganja consumers, unable to suppress their longing for a stimulating drug, will be forced to resort to such plants. They can be gathered for the mere trouble of going out to the jungles, and can be used without the possibility of any interference or check on the part of Government. Already the effects of the seeds of one of such plants, namely, the dhatura, are being felt, and it would be a Herculean task for Government to undertake to discriminate between the several kinds of plants and suppress their growth or to reserve the lands where such plants are growing merely for the purpose of removing or rectifying a social evil. Apart from the question of revenue there are other grounds why it is impossible to enforce the prohibition of the use of the drug in this country. The drug is also produced in the Native States, and the difficulty of preventing its importation would be immense. Even though political danger may not be apprehended by the adoption of repressive measures, yet there will be widespread discontent greatly disproportionate to the advantages conferred on the people by the absolute prohibition of the use of the drugs. The prohibition may, moreover, open the way to the use of alcoholic stimulants.

36. I have not come across any cases of such substitution.

37 to 39. Not known.

40. I have not heard that any school of native doctors prescribes the use of hemp drugs on account of their medicinal qualities. I believe the administration of the drug in the form of a tincture or extract sharpens the appetite and induces sleep. I believe that it is efficacious in cases of delirium tremens where even morphia has failed, and it is said of smoking ganja that it serves as a prophylactic against diseases contracted in malarious climates. The Civil Surgeon, Guntur, writes that medicinally the drug is invaluable as an anodyne, hypnotic and sedative.

41. *Vide* answer to 40.

42. The moderate use of ganja is both approved and condemned by medical authorities of equal weight. The Civil Surgeon, Guntur, informs me that it is said to cause insanity after long-continued use. I have often read that running "amok" is produced by a large dose of bhang; but I only state this as a popular theory. I understand that fakirs and bairagis use ganja commonly to lessen sexual desire, and that after continued use, it produces impotency. Some of its beneficial effects are noted in replies to questions 40 and 41.

43. Moderate consumers are quite inoffensive to their neighbours.

44. The immediate effect of the moderate use of the drug is refreshing. It mitigates physical weakness and mental depression. Intoxication

is an after stage. The duration of its effects depends upon the dose and nature of the preparation. They may last from three or six or even ten hours. The after-effects are general weakness of the body and mind. The want of subsequent gratification produces an uneasy sensation.

45. I can give no satisfactory reply to this question, as I have not studied the effects of the use of the drugs in any particular cases. I believe that their habitual moderate use induces a habit of laziness.

46. The effects of the excessive use of ganja are said to resemble delirium tremens, resulting from excessive indulgence in alcohol. The first indication of the activity of the drug is a child-like gaiety and tendency to find comical resemblances and contrasts in the surrounding objects. A phase of pleasant humour and urbanity succeeds this state of feeling, and is followed by an interval of tranquil rationality, which is a prelude to further excitement. No instance of fatal poisoning by this drug has been heard of.

47 and 48. The use of hemp drugs does not seem to be a hereditary habit, nor does it seem to affect the children of the moderate consumer.

49. Prostitutes are said to resort occasionally to the use of the drug as an aphrodisiac.

53, 54 and 55. As to whether excessive use of ganja necessarily prompts men to violent crime opinions differ widely. While it is maintained by one side that violent crimes have been traced to excessive indulgence in hemp preparations, the other contends that even a moderate use of the drug produces a sense of lassitude and laziness, which is evidently not a predisposition to acts of violence. Chevers remarks that it is a matter of popular notoriety, both in Bengal and the North-Western Provinces, that persons intoxicated with ganja are liable to commit acts of homicidal violence. In some cases of homicide, committed or alleged to have been committed, while under the influence of *cannabis*, one person only has been attacked. Usually, however, the victims are numerous, the case assuming the form known as "running amok." Commonly when acts of homicidal violence are committed while under the influence of an intoxicant, some motive is traceable for the crime. It may be a motive which existed previous to the intoxication or one which comes into existence subsequent to the commencement of the intoxication. In the former case, it may be supposed that the intoxicant is taken by the criminal with the object of nerving himself for the deed. The criminal statistics show, however, that the amount of crime, violent or otherwise, which can be traced to the use of hemp is exceedingly small. It is probable that any latent propensity to crime may be developed by the habitual consumption of the narcotic; but it is exceedingly unlikely that a continued habit of the use of the drug will create

a propensity to crime in men who are constitutionally averse to acts of violence. If standard historical works are to be believed, a drink of bhang makes the native soldier reckless of life. In the account of the defence of Arcot, for instance, the most formidable attack which was repulsed was made during the Moharram, at a time when the Nawab's soldiers were primed with bhang.

56 and 57. No information is forthcoming.

58, 59 and 60. The system of administration prevalent in this presidency in respect of hemp drugs has been described in reply to question 8. The system is, I consider, working well. To obtain accurate information as to where and to what extent the hemp plant is cultivated, and the ganja and bhang manufactured therefrom are consumed or transported for consumption, it is highly desirable that a correct record of cultivation and of sales to the public should be kept. The retail vend of ganja has been brought under regulation only since 1889, no restrictions having been imposed upon the cultivation and possession of ganja. As yet the information available is of too indefinite and uncertain a character to justify the introduction of any stringent repressive measures or the adoption of any elaborate system of administration in regard to hemp drugs. The traffic in hemp drugs may, I think, be left as it is for the present and the results watched, no restrictions being placed upon this cultivation of the plant and possession of ganja by cultivators. Cultivators should not, however, be allowed to sell their stock to others than licensed persons, or to transport it to other districts or provinces without a permit issued by an authorized officer. To obtain a more intimate and accurate knowledge of the subject, it seems desirable to adopt such measures as are calculated to involve a minimum of Government interference and friction. At present so little is known of the subject that it is impossible to say with any degree of certainty as to what may be the best method of treatment. It seems, therefore, better to continue the present system with the modifications above indicated.

62 and 63. *Vide* reply to questions 58 to 60.

64 and 65. None.

66. In the present state of affairs it is not desirable to have differential rates of taxation.

67. I have none.

68. There are no licensed shops where consumption is permitted on the premises.

69. The wishes of the people are not consulted before a shop is opened in any locality. It seems hardly necessary that public opinion should be consulted before a shop is sanctioned or opened. If the people take objection, their objection will always be given due consideration.

70. There does not seem to be any importation or smuggling of hemp drugs from the Native States.

24. Evidence of MR. E. L. VAUGHAN, Acting Sub-Collector, Dindigul.

1. Only general observation and opinion formed by consulting various officers in my division.

2. The only variety in use is the flat ganja, and the shopkeepers of Dindigul and Palni get their supplies from Trichy, and the shopkeepers of Periyakolam from Madura.

3 to 6. No information can be given.

7. Two varieties of hemp plants, *viz.*, pilichai

(Bombay hemp) and shanal (Linem hemp), are cultivated in all the three taluks to a limited extent for their fibre. The villages in which they are grown are—(1) Korikadavu, (2) Akkavaipatti, (3) Manur in Palni Taluk. (1) Tenuampatti, (2) Nathapatti, (3) Marumithu, (4) Athur, (5) Sungalipathi in Dindigul taluk. Very little indeed is grown in the division.

8. None observed.
9. Pilichai seed is sown with ragi crops, etc., and in garden lands, and shanal is raised on wet lands.
10. No. Agriculturists raise the varieties for their fibre.
- 11 to 18. No information available. The drug is sold in very small quantities, and no stock is kept.
19. Ganja is used for smoking. The principal trade is in making a compound called lahiam, which is chewed like betel. The preparation is made by pounding the leaves and mixing with jaggery syrup, dried ginger, etc.
20. Religious mendicants as well as day-labourers smoke ganja.
21. Flat ganja is used for smoking.
- 22 to 24. Charas or bhang not known in these parts.
25. The use of ganja is so very limited that any increase or decrease is not perceptible.
26. No information is available.
27. The lower orders form the main class, although consumers may be found among all classes; they want something strong after their daily labours; and as the prices of alcoholic drinks are becoming prohibitive, the poorer classes take lahiam. The latter is very cheap, being sold at four pies a tola.
28. (a) $\frac{1}{4}$ to $\frac{3}{4}$ tola. (b) Anything in excess of the above average.
29. For lahiam, syrup of jaggery, dried ginger, ghi, pepper, cloves, etc., are ordinarily added to give taste to the preparation. Nothing exceptional. The method is as follows: Ordinary flat ganja is cleaned several times, soaked in milk, and dried in the shade. The roots of vilra, sarsaparilla, kuskus, and sirukirai are powdered, and a decoction prepared therefrom. Dried ginger, pepper, thippili, thesavaram, cardamom, etc., are dried and powdered. The dried ganja is boiled in ghi and the juice extracted. The powder of ginger, etc., being then mixed with the decoction, the extracted juice, honey, sugar, etc., is again boiled and converted into lahiam.
30. Gauja is consumed both in solitude and in company. Information as to extent not available. It is mainly confined to the male sex. Lahiam is given to children to induce them to sleep and as a preventive of diarrhoea. No smoking dens are set apart. The mendicants smoke in *mantapams* and other unfrequented places.
31. The habit is, I believe, difficult to break one's self off when once formed like every other habit. I am unable to give an opinion on the last point, as I have never been in any district where the drug was used very extensively. My subordinate officers answer all these questions in the affirmative.
32. As is the case with alcohol, ganja is offered to Karuppawaswami and other village deities, and libations are poured. The *pusari* or the people about the temple take it afterwards for private consumption. It is not certainly an essential offertory. The offertory varies with the size of purse of the worshipper. These offertories may lead to a development of the habit by the *pusari*, but the amounts offered are very small.
33. All the higher castes in India view the use of alcohol and narcotics as vicious, if nothing more; and Muhammadans are strictly forbidden to use it in the Koran. Nobody worships the plant.
34. Ganja is used as a stimulant by working classes to alleviate fatigue and to overcome exhaustion. To forego the consumption of the drug will no doubt be a serious privation.
35. As the number of consumers is limited, the use may be prohibited by abolishing the shop. But the effect will, of course, be to make these take to alcohol as the only alternative.
36. No.
- 37 to 39. No information available.
40. Ganja is prescribed by native doctors to promote digestion, to check diarrhoea, and to revive appetite.
41. Native doctors weaken its power and use it in preparations to accelerate digestion, to prevent indigestion, and to invigorate the nerves. All classes use this when administered as a medicine.
42. I have no reason to believe it harmful if used in moderation any more than is tobacco to a European.
43. Not known to be offensive.
44. It first refreshes and excites them, and they afterwards become sleepy. The soporific effect of eating it lasts about six hours; of smoking it one or two hours.
- 45 to 48. No information available.
49. It is said to be used as an aphrodisiac.
- 50 to 52. No information.
53. It is said to lead to crime by exciting the person at first.
- 54 and 55. No information.
56. Dhatura is known here as "Ooma thangai." It is not known to be ever mixed with the drug in this division.
- 57 to 67. No information.
68. Two shops in Dindigul and one in Palni and Periyakolam. The consumer swallows the thing as he goes from the shop or takes it home. No licensed smoking dens.
69. Yes. The Municipal Council is consulted. I doubt if there is any "public opinion" as we understand the term in England in the matter.

25. *Evidence of MR. W. FRANCIS, Acting Head Assistant Collector, Ramnad.*

1. No special opportunities.
2. Yes. The names used here are those employed in Ramnad. Flat ganja alone is met with here.
3. Hemp does not grow spontaneously in Ramnad division.
4. Only one name, ganja.
5. *Vide* answer to No. 3. I have no knowledge of its habit.
7. Six years ago before the introduction of the ganja license system, the plant was very generally grown here. It is now grown nowhere but in a few flower gardens for medicinal purposes. Only flat ganja was ever manufactured from it.

8. *Vide* answer to No. 7.

9. No special methods were adopted in its cultivation. It is grown on the same soil and under the same conditions as brinjal, kodaikal or any other vanpayir crop.

10. No; they were the ordinary agricultural class.

11. No.

12. I have no knowledge of the wild hemp plant.

13. A license is required for its cultivation in this district. Apparently not. When cultivated here it was successfully grown on wet red and black soils, and on dry sand and hilly ground.

14. The plant (for preparation of ganja) was grown formerly. *Vide* answer to No. 7. Ganja sellers now import their ganja from North Arcot where the wild hemp is said to grow spontaneously on the Javadi hills.

15. These products are not prepared in this division, and no information is available as to their methods of preparation. It is said that the cultivated plant is best made into broken ganja, the wild into flat and round ganja.

Ganja and tobacco are chopped and mixed for smoking.

Ganja, pepper, ginger, and spices are mixed with sugar and ghee and eaten.

Ganja, pepper, and spices are pounded up in water and drunk.

16. No. Ganja and bhang can both be made from the plant grown here, not charas. Charas can be made out of the wild plant that grows in North Arcot.

17. The cultivators themselves used to prepare the drug when hemp was formerly grown here.

18. Charas will keep two years, and bhang and ganja one year without deteriorating. Charas still has some efficacy after five years and the other two after three years. After this they are useless. These periods are given on the assumption that the drug is not exposed to the air. If exposure be allowed all three deteriorate more rapidly.

19. Ganja is used for smoking and for eating and drinking (*vide* answer to No. 15).

20. A very small proportion of the people here use ganja. Charas is never used except by pilgrims from the north. Sudra paradesis consume the most, but Maravas, Pallars, and Agambadians do use it, as do some Muhammadans.

21. Flat everywhere.

22. Charas, as said above, is not here used. Northern pilgrims bring it with them occasionally.

23. No.

24. It is said that formerly when the plant was cultivated here, bhang was both eaten and drunk by the classes mentioned in answer to No. 20 along with ganja. This is no longer so.

25. Up to last year the yearly sales of licenses had somewhat increased for three years following. Last year there was little rain, and the consequent heat caused a falling off in the consumption.

26. The classes given in No. 20 and Paradesis are (a) of ganja. North country bairagis may perhaps come under (b) of ganja and charas.

28. If ganja be taken—

(a) may be 1½ tolas (value six pies), and

(b) four tolas (value one anna four pies).

29. Ganja is often (perhaps ordinarily) mixed with tobacco for smoking. Dhatura is not used, and bhang massala is not known.

30. Smoking parties are the custom, one man being the host and finding the ganja, etc. Quite confined to male sex. Confined to no particular time of life, except that children are not allowed it.

31 (a). Yes.

(b) Yes.

(c) Doubtful. No general rule can be laid down any more than with ordinary tobacco smokers. Differs in tendency with different constitutions.

32. No such customs here. The consumption of the drug is mainly a social custom.

33. There may be some slight social public opinion against excessive ganja smoking (not against moderate consumption) as it is apt to make the smoker lazy immediately afterwards. No worship of the hemp plant is known.

34. Yes, undoubtedly. Habitual consumers, whether moderate or excessive, are said to suffer much and to deteriorate physically if the drug is denied them.

35. It would be exceedingly difficult. If the shops were closed, the drug could with ease be illicitly prepared and secretly cultivated. The prohibition could only be enforced by obnoxious espionage by the police, whose powers for annoyance would be greatly increased. Consumers would experience undoubted discontent, but here they are so few that their discontent would hardly have any marked political aspect. Opium would perhaps be resorted to, but there is no efficient substitute for ganja. Alcohol is too expensive (in the form of arrack) for the average consumer.

36. No; as stated above, alcohol is expensive, and not real substitute for ganja.

37. Charas smoking is said to produce more marked lethargy.

38. Flat ganja alone, as already stated, is here consumed.

39. Smoking is said to be the more injurious. Just as with tobacco, there is a liability that the throat and sight may become affected. Such liability seems slight.

40. Ganja is used medicinally by native doctors for complaints in the stomach.

41. Ganja is said to be marked in its effect on digestion, which it assists, and to promote staying-power under exposure or exertion. There is no fever here, and it is not employed as a febrifuge. I refer to the moderate habitual use of the drug in the shape of ganja and in the case of the classes already mentioned.

42. Moderate use appears to be quite harmless, and to be even beneficial for the reasons given above.

43. Perfectly.

44. Yes. It produces temporary lethargy. It does not allay hunger markedly, and is even alleged to create appetite. The effects do not altogether disappear for some few hours. Only after-effect seems to be a slight lethargy. Absence of subsequent gratification produces longing.

45. (a). No; none are discoverable.

(b). No; *vide supra*. It supports it.

(c). No.

(d). Smoking is said to cause now and then throat affections of a nature not clearly known.

(f) No. It dulls the intellect temporarily only during the lethargy consequent upon it.

46. No cases of any injury are here ascertainable. It is said that habitual excessive use has been known to impair the intellect.

47. No, there appears to be no reason to consider that the habit is ever due to heredity.

49. The drug is said to be an aphrodisiac, but there is no general employment of it for this purpose.

50. Not as far as can be ascertained.

51 and 52. No. No traceable connection exists.

53. No, on the other hand its effect seems generally in the case of the moderate consumers of these parts to produce indolence rather than excitement.

54. Not as far as can be ascertained.

55. No cases have occurred here. Yes; it is said so.

56. The substances mixed with it here (*vide supra*) are used as flavouring rather than for modifying its effect. Dhatura, as stated above, is not here used. It is said to add to the intoxication produced by the drug.

57. No differences in the effect of the drug when eaten and drunk and when smoked are particularly noticeable. A given quantity of the drug is more efficacious when eaten or drunk than when smoked.

58. No complaints are made against the present system.

60. The cultivation is so sufficiently controlled that it has been altogether crushed. Ganja, however, as already explained, is imported ready prepared from other districts, and as long as this continues possible the system need not be changed. The raiyats can cultivate other crops.

61. Charas is not produced here.

62. No additional control seems required. The use of the plant is in no way abused, nor is ganja dangerously common or cheap.

63. The present system appears to supply the needs of this part of the country sufficiently well.

64. No.

65. The three are taxed alike apparently. Consumers of ganja are usually poor, and the increase of the tax would cause much discontent.

66. Not as far as is apparent. Here, however, fat ganja only is known.

67. The ultimate incidence of the tax falls now upon the consumer.

68. No such houses or shops are known here.

69. Shops are located at regular distances so that all consumers may have the power of getting their supplies with the minimum of inconvenience. The shops are in no way a nuisance to their neighbourhood, and no complaints against their location have been received. There is no local public opinion on the point to be considered.

70. Yes, duty is paid. This is no general use of untaxed drugs.

26. Evidence of MR. R. F. GRIMLEY, Acting Head Assistant Collector, North Arcot.

1. I have had no personal experience and have merely been able to collect information on the subject from medical men—European and native—Missionaries and others in my division. Few of my informants knew much about the matter.

2. My information is that ganja and charas are manufactured simultaneously from the hemp plant. The leaves and buds are pressed with stones. The expressed juice is charas and the residue is ganja. Bhang is merely powdered ganja. Ganja and bhang are known to all sorts of people. Bhang is also known to consumers as subji. Charas is known to very few people.

3. It is said that it is grown on Javadi hills. It is not grown spontaneously in any part of the division.

5. It is said that a cool climate with abundant rainfall is favourable to the growth of the plant, but that these conditions are not necessary.

7. It is said that in Maderpank division it was cultivated in 1831 on about 174 acres of dry land for use as manure, but not with the intention of obtaining drugs. It is also reported that the plant was to a small extent cultivated there for its fibre.

15. Ganja is usually smoked. It is often mixed with tobacco. Bhang massala is manufactured out of ganja. Dry ginger, *sombu*, poppy seeds, cows' milk or coconut milk are mixed with ganja, the solid ingredients being powdered. Bhang is only drunk as bhang massala.

16. Yes. It is generally prepared by the people in their houses.

17. Fakirs, the lower sort of Muhammadans and Hindus, bairagis, sanyasis (ascetics).

18. Bhang will go bad in two or three days. Ganja is said to lose its strength after ten months.

19. Many people eat ganja.

20. The lowest classes of the people. The use of charas here is very rare.

23. No.

24. It is only drunk as bhang massala. Only a small proportion of those classes of people who have been named against question 17 use it.

25. Said to be on the decrease. Decrease owing to use of toddy and arrack.

27. Some contract the habit in order to help digestion, others to excite sexual appetite, others to intoxicate themselves.

29. It is said that dhatura is used by those on whom, owing to long habit, bhang massala has ceased to operate with its former intoxicating effect. These persons are said to coat the inside of the pot which they use with dhatura juice and to pour in bhang massala after the juice has dried. It is said that bhang (*i.e.*, powdered ganja) is only used as bhang massala.

30. Respectable people consume them in secret. They are very rarely used by respectable people. Majum-ghee and ganja. These are fried together and nutmegs, almonds, cinnamon and cardamoms are added. This preparation is sometimes given to children to help digestion and to induce sleep. It is also eaten by adults. It is not confined to any time of life. It is mainly, if not entirely, confined to the male sex.

31. It is said that under the influence of had company the habit is easily formed, and that it is not very difficult to break off the habit gradually. There is a tendency to go from moderation to excess. It is usual to increase the dose from time to time, but it does not necessarily follow that the increased dose is excessive. The dose is usually increased owing to the diminished effect produced by the drug in the course of time.

32. None.

33. The consumption of these drugs is generally regarded as degrading. This is the public opinion (social and religious). The use of intoxicants is prohibited by both Shastras and Koran, and is therefore held in disrepute, social opinion being in conformity with religion. There is no such custom.

34. No. It is said that the habit can be broken off much more easily than the opium habit.

35. Prohibition of the use of any or all these drugs would cause discontent, but only amongst the consumers. If the use of these drugs be prohibited, recourse will be had to opium or alcoholic stimulants. The discontent amongst the consumers would not amount to a political danger. Non-consumers would rejoice. The consumers are too few to be formidable.

37. Charas is a more powerful intoxicant than ganja. Charas is occasionally used by those on whom ganja has ceased to exercise its former effect. It is so powerful that nobody would use it in the first instance.

38. It is said that flat ganja is stronger than chur ganja.

39. Ganja smoking is more injurious than drinking bhang massala. The smoking of ganja (or charas) affects the breathing, and produces chronic cough.

40. Ganja is used in a medicine, called yakoti, for producing sexual appetite. It is eaten. Cannot be bought at the bazar. Hindus call it "Madanakameswara Leghyam." Ganja is also prescribed as a digestive.

41. (a) Yes.

(b) Its effect is refreshing.

(c) No.

42. Beneficial when used as medicine, otherwise even the moderate use of these drugs is injurious. They increase bile, cause loss of blood, and emaciation. If consumers fall sick, they readily succumb.

44. Bhang allays hunger temporarily, ganja causes intoxication at once, while bhang does so after a little time. The effect is said to last for two or three minutes. No after-effects. The use of these drugs is refreshing.

45 (a) Yes.

(d) Yes; causes asthma after four or five years.

(e) Causes laziness.

(f) Deadens intellect. Ganja produces insanity when taken in excess.

(g) Not used to relieve mental anxiety.

47. No. Children are said to be somewhat weakly.

49. (a) Yes.

(c) No.

(d) Ganja produces impotence after three or four years.

51. I have not observed any connection between the use of these drugs and crime.

57. Ganja is eaten and drunk, charas is only smoked.

27. Evidence of Mr. H. F. W. GILLMAN, Acting Head Assistant Collector, Nilgiris.

1. By enquiries in the South-East Wynad division of the Nilgiri district.

2. The dried leaves of the plant are not used for any purpose; but the green leaves, which are known by the name of bangi soppu (ganja leaves) are used in the preparation of a liquor to be hereafter described. Charas and ganja are known in the division by the same names and have the same meaning as is here given.

3. The hemp plant grows spontaneously in this (the Nilgiri) district. It is fairly abundant in the South-East Wynad division.

4. As ganja seddi (shrub) and (bangi). Yes.

5. I am not aware of the existence of wild hemp in the division, or that any of the hemp drugs are manufactured from it.

7. (a) Yes.

(b) Yes.

(c) Yes.

(d) No.

In the South-East Wynad division above referred to in the back-yard of houses.

8. There has been no great increase, so far as I can ascertain.

9. No particular trouble, such as ploughing, manuring, transplanting, etc., is taken about the

cultivation of the plant. The seeds are sown in April and May, and the plants come up with the rains in June. The male plants are cut out when distinguishable. The female plants are left alone until they reach maturity in the next January and February, when they are cut and dried.

10. No. The classes who smoke the drug in this division are Chetties and Muhammadans, and the aboriginal tribes, Koters, Kurumbers, etc.

11. I do not think so.

13. I do not think there is any restriction of cultivation to districts. I cannot say if the cultivation is common to all districts. The cultivation of hemp for ganja is possible in all parts of my division.

14. All these products are prepared in my division; but the extent is not ascertainable, as the preparation is not recognised or permitted by Government.

15. Flat ganja, the only kind known in the division, is thus prepared. The mature female plants are cut into lengths of 1 to 1½ feet and are made up into bundles. These bundles are then placed under weights for several days, the result of which operation is that each bundle of twigs and leaves is made into a sticky mass by the help of the resinous gum exuding from the leaves. Ganja is only used for smoking. The flowers are

separated from the mass, and about $\frac{1}{2}$ tola weight of them mixed with tobacco and smoked in a pipe. Charas is not known as an article of commerce. Every smoker prepares as much of this resinous exudation as he requires, squeezing the green leaves of the plant in his hand and so collecting it in his palm. He then takes some tobacco, and thoroughly mixes it with the resinous matter in his hand and smokes the mixture. What is here known as bhang is a liquor prepared by grinding the green leaf of the plant with pepper, cardomoms, dried ginger, and a flower called madanakam, adding sugar to the mixture and boiling the whole in milk. This is supposed to be beneficial for affections of the heart and stomach.

16. Not generally. I believe bhang can be prepared from the hemp plant wherever grown.

17. By no particular classes. Every consumer as a rule, makes his own preparation.

18. The drugs are not kept, but are consumed at once.

19. Yes.

20. I can give no definite information on this point.

21. Flat ganja alone is smoked.

22. Native charas, prepared as described in answer to question 15, alone is used.

23. Not to my knowledge.

24. Particulars not known.

25 to 28. No information available.

29. Tobacco is the only ingredient mixed with ganja and charas, and sugar, milk, and spices with bhang. There is no preparation named bhang massala used here.

30. The consumption of these drugs is confined to adult males. Children never consume them.

31. The habit is easily formed in the case of persons whose fathers are addicted to it. I know of no case in which the habit, once contracted, has been broken off. I believe that the majority of consumers in my division are moderate consumers.

32. There are no customs here connected with the consumption of any of the drugs.

33. A moderate ganja or charas smoker is not considered as a disreputable person. But a habitual excessive smoker is considered in the same light as a habitual drunkard, and looked down upon accordingly. No stigma whatever attaches to the consumption of bhang, which is either taken as medicine or drunk or eaten (as the sweetmeat majum) at marriages and feasts. There is no custom of worshipping the hemp plant known to me.

34. Any attempt to prohibit or interfere with the consumption of the drugs in this division would be misplaced. The consumption of the drugs is very small; so small, indeed, that Government has determined to ignore it and not to introduce shops with attendant rules and regulations that might foster it. Almost all the ganja

smokers in the division are moderate in their use of the drug, and prohibiting its consumption would be an injudicious step, and cause much discontent without being productive of any good.

36. No.

37. Ganja is the more powerful of the two drugs, and produces more prolonged intoxication.

38. Only flat ganja is consumed here.

39. In this division ganja and charas are only smoked and bhang only drunk or eaten in the form of sweetmeat. The question is, therefore, not applicable.

40. I do not know.

41. I am not in a position to give information on these points.

42. I certainly think that the moderate use of the drugs does very little harm. All the smokers whom I have seen did not appear in any way debilitated. All that I noticed was a slight dulling of their senses.

43. Yes.

44. The immediate effect is to produce intoxication, which lasts for two or three hours. It is said by the smokers to create appetite and presumably hunger is allayed for the period that the smoker is in a stupor from the action of the drug. Habitual excessive smokers suffer, I am informed from poverty of blood and debility. In the case of habitual smokers, abstention from the drug creates longing for it.

45 to 48. My knowledge of the effects of the drugs is not so extensive as to permit me to offer an opinion on these points.

49. No information is available on this point, as smokers are naturally averse to speak about it. The excessive use of hemp certainly tends to produce impotence.

51 and 52. No; there is no connection between crime and the use of these drugs.

53 to 55. No cases known here.

56. Hemp is not mixed with any other drugs.

57. They are not in this division.

58. The system has not been introduced into the division, and I have no experience of its working.

60. The cultivation of the plant is not controlled, and as it is very limited, being confined to the backyards of houses in a few villages, I do not think there is any need for it to be.

61. Charas is not produced as an article of commerce.

63. There is no vend of any of the drugs in the division.

64. There are no regulations, and none are needed.

65. There is no taxation.

66. Having had no experience of the present rates of taxation, I cannot say.

68. No.

70. No.

28. *Evidence of Mr. J. H. MERRIMAN, Deputy Commissioner of Salt and Abkari, Central Division.*

1. My answers are chiefly based on information received from my subordinates and relate to the Kistna, Nellore, Madras, Chingleput, North and South Arcot, and the four ceded districts.

2. The term ganja, in this division (centre of the Madras presidency) appears to be applied indiscriminately to the hemp plant, its leaves, and flowering tops, and to the preparations therefrom used for smoking.

The term bhang here is applied to the drink prepared from ganja.

The term charas is practically unknown.

Flat ganja is locally known as kalli ganja, round ganja as karuthanu ganja, and broken ganja as aval ganja. Flat ganja is that best known and used.

3. Does not, as far as I have gathered, grow spontaneously in my division.

4. The different names given to the cultivated plant are:—

By the poorer classes.

Bangaku chettu, Ganja chettu.

By the better classes.

Alwariah pathri, Ganja pathri, Basuva pathri, Siva pathri.

These refer to the same plant.

5 and 6. I believe all the hemp plants in my division are of the cultivated species.

7. (a), (c), and (d). The hemp plant is cultivated in abundance on the Javadi hills in the Salem district, Vellore and Polur taluks of the North Arcot district, and Tiruhnamalai of the South Arcot district. It is also a good deal cultivated in the Nellore district, and specially in Duggipad, a village in Bapatla taluk of the Kistna district. For the rest a few trees are grown in backyards in many parts of the division.

8. Uncertain.

9. When ganja plants are seven or eight inches high, the upper part of the stem, about $\frac{1}{2}$ inch, is cut off. After a week, when the plant sprouts on all sides, it is transplanted. Three months after transplantation the plants are four or five feet high. When the stems are gummy the plants are cut off about three inches from the ground and allowed to remain for full three days. On the fourth night, and under the sun, they are collected and stacked and kept in this state for ten days, and then, after removing stalks, they are trodden down in bags and tied up. An acre of land gives about 750 lbs. weight of ganja, including stem and stalk. Half this quantity is useless.

10. No special class. On the Javadi hills the persons who grow it are called Malayalies, but they cultivate other things besides the hemp plant.

11 and 12. *Vide* answer to question 3 above.

13. No restriction in the Madras presidency. Cold climate, red soil, moderate rainfall, and high elevation are said to suit the plant best, but it appears to thrive also in the plains.

14. Ganja and bhang (the drink) as defined in answer No. 2 above. In every district to a small extent. But see answer No. 7.

15. (a) *Cultivated plant.*—Ganja is thus prepared for—

(A) *Smoking.*—The tops are rubbed in the palm of the hand till all the ends are removed and a little water is added till it forms a stiff paste, when it is mixed with a little tobacco and placed in a pipe and smoked. A rolled leaf is sometimes used instead of a pipe.

(B) *Eating.*—The preparation eaten is called majum. The ganja is ground with a little water and the mass strained through a cloth. The juice thus passed out is added to boiling sugar or jaggery, cardamoms being also added to taste. The whole is then turned out on to a flat dish or stone, and when cold is cut into squares. Some of the poor people simply grind the ganja with a little water and then eat it. This is said to be more intoxicating than when prepared as a sweetmeat.

(C) *Drinking.*—The preparation drunk in these parts is called bhang. It is thus prepared. The ganja, boiled or raw, is ground with poppy seeds, dry ginger, and almonds, and the matter is strained through a cloth, the resulting liquor being mixed with milk and sugar and drunk. Some drink it without milk and sugar, when it is said to be more intoxicating.

16. (a) and (b) Yes.

(c) No wild hemp here.

17. Chiefly by Muhammadans, but by other classes also to some extent.

18. Ganja.

(a) and (b) Yes.

(c) About three years.

(d) Moisture chiefly.

(e) Keep well packed and free from exposure.

A statement showing the number of ganja licenses issued and the amount realized in the Madras town is shown below.—

	Year.	No. of licenses issued.	Revenue.
Licenses issued at Rs. 30 per year.	1889-90	42	1,260
	1890-91	45	1,365
Shops put up to auction.	1891-92	30	4,795
	1892-93	35	6,117
	1893-94	35	8,225

Apparently the trade is on the increase here.

19. Ganja is smoked. Majum eaten and bhang drunk everywhere; majum, however, chiefly in town.

20. All the poorer classes, but chiefly Muhammadans and religious mendicants.

21. Flat ganja chiefly used.

22. Charas is practically unknown here.

23. *Vide* answer to question 15. The dry leaves are used for smoking.

24. The poorer classes, but chiefly Muhammadans and religious mendicants.

25. An open question in the absence of reliable statistics. The figures in chapter IV point to an increase.

26. Can't say.

27. Chiefly Muhammadans and the poorest of other classes who can't afford more expensive stimulant, such as arrack and opium.

28. (a) $\frac{3}{4}$ tola, costing three pies.
 (b) Three tola, costing an anna.
29. *Vide* answer 15. It is not known that dhatura is so used.
30. (a) Can't say.
 (b) Chiefly males, 20 to 40.
 (c) Very rarely, except as medicine.
31. Yes to all the queries.
32. Bhang is prepared by Bandilis, Rajputs, and Mahrattas on the last day of Dessara (Durgapuja), and worshipped before being used by the inmates and friends. It is also used at funeral ceremonies of such as were consumers of it when alive. Among the males on the day of the ceremony some is placed in the grave and some given to the assembled guests, at least such of them as are consumers. It is an essential part of the above ceremonies. It is also used at weddings, but it is not essential. The use of the drug on the above occasions is often carried to excess, but I can't say whether it is likely to lead to the formation of the habit.
33. *Ganja and bhang*.—The practice is undoubtedly looked down on from a social point of view, and I attribute this chiefly to the fact that the consumers are so largely of the poorest and most wretched classes, who can't afford more expensive stimulants, such as arrack and opium. I know of no custom of worshipping the hemp plant, but believe it is held in a certain sort of veneration by some classes.
34. A very serious privation indeed to the poorest classes, who can only afford this cheap form of stimulant.
35. (a) Very difficult.
 (b) Yes.
 (c) By increasing the already enormous staff of the Salt and Abkari Department.
 (d) Yes.
 (e) Not in this presidency.
 (f) Probably.
36. No, I believe that, broadly speaking, those who have adopted the hemp drug habit have done so chiefly because they cannot afford alcohol.
- 37 to 39. Don't know.
40. Considerably. Both the Hindu and Muhamadan doctors largely use ganja in their medicines for various diseases. Ganja mixed with water is given to cows which will not allow themselves to be milked. The ganja is also given to women in protracted labour pains.
41. Majum is said to assist digestion, to give staying-power, and to act as febrifuge. In diarrhoea it is also said to be used. I refer to moderate use.
42. The moderate use of the drug I consider harmless, and often even beneficial for the purposes mentioned in the preceding answer. Alcohol or opium might be preferable, but many who use the ganja drugs can't afford the more expensive stimulants mentioned.
43. Yes, as a rule.
44. The immediate effect of the moderate use in the habitual consumer is that he is refreshed, slightly intoxicated, and his appetite increased. The effects of a smoke are said to last for an hour, and those of a drink of bhang for three or four hours. The want of ganja causes great uneasiness, and a man deprived of his smoke loses

his appetite and desire for food, and cannot settle his mind to anything till he gets his smoke.

45 and 46. So far as I can gather, the habitual moderate use of ganja does not produce any bad effects: the danger lies in the excessive use of the drug. The excessive use of ganja makes a man lose all self-respect, abandon his usual business, and live by begging. It also brings on insanity. A peon of this department from being a moderate habitual consumer, became an habitually excessive consumer, was dismissed, and is now wandering about Kurnool begging what food he can and spending any money obtained in ganja. A man of the Baliya caste of Atmakur was sent into Kurnool insane from the same cause. He was kept under observation in the Kurnool jail and recovered in about a month. After his liberation he took to the drug again, and now is quite off his head again wandering about Kurnool. A police constable, Tippana, is also wandering about begging in Kurnool insane from the same cause after deserting his appointment. Another man of the Baliya caste, Kulnagalingam, went off his head from ganja smoking, was kept in the Kurnool jail for three months without any good results, and was afterwards sent to Madras, whence he returned cured. After nine or ten months he took to the drug again, with the result that he is again insane, begging about. This man was a fairly well off trader before taking to ganja.

47 and 48. Not as far as I can learn.

49 and 50. Opinions differ. The excessive habitual use is said to produce impotence.

51 and 52. Can't say.

53. I think the excessive use of the drug leads to unpremeditated crime. A pensioned sepoy of Kurnool, who was an excessive habitual smoker, when under the influence of the drug, murdered his daughter-in-law, her brother, and sister, and I have heard of other cases just as one hears of such being the effect of excessive indulgence in alcohol.

54 to 57. Can't answer.

58. With regard to the questions in chapter VII, I am acquainted with the present system of excise administration in this presidency in respect of hemp drugs, and I do not think the consumption is large enough in this presidency to call for any further interference than that now in force.

Oral evidence.

I have been twenty-five years in the service, and am Deputy Commissioner of Abkari and salt in the Central Division. I have been thirteen years in this Department.

Question 7.—I have not seen any of the cultivation referred to in my answer No. 7. What I have said is based on the statements of subordinates. I have never seen field cultivation in my life. I have only seen a few plants in back-yards.

Question 45.—The cases of insanity quoted here were merely reported to me by my Inspector at Kurnool. I have not seen any of them. The Inspector has no medical knowledge.

Question 59.—I think that cultivation is here so small that the extra expense and what I may

call oppression involved in prohibition is unnecessary. There is a good deal of back-yard cultivation which is untaxed. It would be desirable to stop this sporadic cultivation, if feasible. I think we could do this. I think it would be far simpler to issue an order stopping cultivation; and that would be far easier than attempting to tax it. I believe this cultivation could be stamped out by the mere issue of the order. And supposing that there were reasonable facilities for consumers obtaining the drugs, the dissatisfaction would not be great. I speak only of my own division at present, but I know the whole presidency except a little on the west coast. I think my remarks apply to the whole presidency so far as I know it. I think that the absolute prohibition would require extra establishment for a time. The present establishment would have to be increased, but not to any large extent. And this extra establishment would only be required for a short time. When the thing was established it might be dispensed with. When you show the

people that you want to carry out an order, they will do so at once. Ganja is much more lightly taxed than alcohol, and very much cheaper in consequence. The great bulk indeed is not taxed at all. There is in my opinion a margin for a considerable increase in taxation without equalising the tax on alcohol and ganja. I think that at present a man who takes ganja has to spend on the average three pies a day; and the man who takes arrack pays about from nine pies to one anna six pies a day. The toddy drinker pays about the same as the arrack drinker. These are about the average figures for an average moderate consumer. If a moderate consumer of alcohol took his dram a day, he would pay about Re. 1 as. 8 a month in the interior and Rs. 3 in Madras. Both liquor and ganja are under my charge; but of course ganja occupies comparatively little attention. I cannot say that I can state anything definite regarding their comparative effects. I am not prepared with an opinion.

29. *Evidence of* RAO BAHADUR R. DHARMARAO, *Deputy Commissioner, Salt and Abkari, Northern Division.*

Oral evidence.

Question 1.—I have been nearly thirty-three years in service, 25 of which have been passed in the superior grades as Deputy Commissioner and Magistrate, Salt Deputy Commissioner, Temporary Deputy Commissioner in Ganjam, Personal Assistant to the Commissioner of Salt and Abkari, Assistant Commissioner of Salt and Abkari, and now Deputy Commissioner of Salt and Abkari. I have served principally in the Northern Circars.

Question 7.—The ganja which is used in these districts comes partly from Daggupadu in the Kistna district, where the cultivation is about 100 acres, and partly from the Agency villages and the backyards in various places. In Daggupadu there is regular cultivation and manufacture. As well as I know, the manufacture in other places is of a rough kind. There is no regular cultivation in any other of the four districts. There is a good deal of the sporadic cultivation both in yards and fields and gardens. Ganjam gets ganja from Cuttaek also, I think. The hemp plant does not grow wild except when a seed may have fallen by accident. I do not think I should recognize the wild plant if I saw it, if it is unlike the cultivated plant. I have not heard of the drugs having been made from the wild plant.

Question 20.—I think the consumers of the hemp drugs number as many as 3 per cent. of the whole population in the towns, and 1 to 2 per cent. in the rural tracts. This estimate is the result of consideration of the matter, and not a mere guess. These figures represent the present state of things since the railway works have been opened. The foreign labourers are scattered along the line as well as resident in the towns, and have raised the proportion of consumers in both rural tracts and towns. I do not think the habits of the people of the country have changed. On the contrary, the number of native consumers tends to decrease because the people of this part of the country do not enter military service as much as they used to do. Soldiers acquire the habit on service in other parts of India. In Vizianagram where there are soldiers and foreigners employed, the number of consumers is much greater than in Vizagapatam.

Question 36.—The statistics of liquor consumption show an appreciable increase in Ganjam and Vizagapatam and Kistna where the issues of liquor are recorded. In the Godavari district also where the tree-tapping system is in force the revenue is on the increase. But I do not think that these increases have affected the consumption of the hemp drugs. The revenue of the hemp drug shops has also risen. I think the opium and hemp drugs habits are so related that the one would be affected by any variation in the other, but I have no facts to base this opinion upon. I should like to say that the increase in the liquor revenue has been brought about by the suppression of smuggling and illicit distillation.

Question 45.—The habit of smoking ganja is sometimes formed by association, but generally it is adopted as a protection against malaria and bad water. Ganja is prescribed for diarrhoea by native doctors. I think the drug has beneficial effects in improving the digestion and curing bowel complaints, if it is used in moderation and is accompanied by good feeding. If used in excess the drug produces weakness and emaciation, and causes laziness and loss of temper, and even in extreme cases, insanity. This excessive use is very uncommon in these four districts, and I have only seen the bad effects in two bairagis who came from the north. I remember seeing two such men, one at Chicacole and one at Ellamanchali, who were behaving in an insane manner. The people standing about in both instances said the men had been taking ganja. These are the only cases in which I have learnt of such serious results occurring.

Question 51.—I do not think the drugs have anything whatever to do with crime. As Police Officer and Magistrate, I have never had any reason to connect the two. Alcohol on the other hand is provocative of crime, particularly in the toddy season when fights and petty violence are common.

Question 59.—I do not think there is any necessity to prohibit or impose further restrictions on the hemp drugs in the districts of which I am speaking.

There is no direct restriction on the cultivation, possession, import, transport or export of ganja.

The sale only is under control. The revenue is too small to make further restriction important from a revenue point of view. A restricted possession will necessitate an increase in the number of

shops and in the preventive establishment. There is no necessity for such a measure, but I don't think there is any objection to it beyond what I have stated above.

30. *Evidence of Mr. F. LEVY, Acting Deputy Commissioner, Salt and Abkari, Southern Division.*

1. None. The answers below are merely based on the reports of my subordinates.

2. Ganja appears to be the only kind that is common in the south of this presidency. The products referred to appear to be named ganja, bhang and majum.

3. Seldom grows spontaneously. Said to do so in some parts of the Calicut and Kurumbranad taluks of Malabar district, and in the Satyaman-galam taluk of Coimbatore.

4. Ganja seems to be the only name.

5. Said to flourish on tops of hills and in humid climates.

6. Said to be scattered.

7. Stated to be cultivated in the Wynad for sale to licensed vendors, and at the foot of the Western Ghats for private consumption. The Assistant Commissioners say that in the Negapatam, Erode, and Tinnevely subdivisions the cultivation is confined to back-yards and gardens, and is very limited.

8. *Nil.*

9. Transplanting about July is adopted. The soil requires to be highly manured. Sheep and fowls said to be utilized for the purpose. Pruning and propping of the plant is essential.

10. Ordinary raiyats.

11 and 12. Not known.

13. Not restricted. Cultivation as above (*vide* answers to questions 5 and 7). The Erode Assistant Commissioner suggests that its cultivation would be impossible in the higher regions of the Nilgiris.

14. Ganja said to be prepared in the Wynad and imported into other districts. Bhang stated to be prepared to an inconsiderable extent in towns of Madura and Tinnevely.

15. There is no difference in the methods of preparation. After being cut and dried, the plant is exposed to the night dew, and rolled up and heavily weighted during the day until the tips begin to exude a resinous substance on pressure.

(a) The dried flowers are rubbed into powder with the fingers and mixed with tobacco.

(b) The flower is soaked in water or cocoanut milk and then boiled in milk. Butter is then made from the milk, to which is added sugar and spices.

(c) Prepared from the dried leaves of the male hemp plant by being ground into a paste and dissolved in some liquid—milk or water, with spices, pepper and ginger.

16. Generally in private houses.

17. By those that consume them who are usually Muhammadans and the lower Sudra castes, bairagis, saniyasis, etc.

18. Bhang rapidly deteriorates. Ganja if exposed to sun and night dew every two or three months is said to keep without deteriorating for two years. Fermentation from damp stated to be the chief cause of deterioration.

19. Ganja is generally used for smoking.

20. The Erode Assistant Commissioner fixes the proportion at about 1 to 1,000. As to classes and localities, *vide* answers to questions 14 and 17 *supra*.

21. Flat ganja is preferred.

22. *Nil.*

23. *Nil.*

24. The consumers are very few.

25. Thought to be on the increase. No satisfactory reasons assignable.

26. No information.

27. The labouring classes generally. The practice is resorted to, to mitigate the feeling of exhaustion.

28. (a) From $\frac{1}{4}$ to 1 tola.

(b) Up to 3 tolas.

29. *Vide* answers to question 15 *supra*.

30. The general opinion seems to be that it is consumed in company, and as a rule by adults only of both sexes. Majum is, however, said to be given to children to make them sleep.

31. Easy to contract, but difficult to break off. The appetite grows, it would seem, with what it feeds upon.

32. *Nil.*

33. The use of the drugs is usually regarded as vicious. It does not appear that the hemp plant is worshipped.

34. Generally thought that it would be a serious privation, especially in the case of the Moplahs of Malabar. The Erode Assistant Commissioner thinks that habitual consumers, such as sepoys and bairagis, require the drug as a stimulant to keep them in health and spirits.

35. In the extreme south of the presidency it is believed that the prohibition would be feasible, the practice of consuming the drugs being so limited. Elsewhere it is considered that the entire prohibition is impracticable, and would result in illicit consumption. Amongst the Moplahs it is considered that the prohibition would result in serious discontent and render a large increase to the preventive force necessary. The prohibition of ganja would probably result in the increase of the opium consumption.

36. No information.

37. Not known.

38. *Nil.*

39. No unanimity of opinion on this point.

40. Yes; by native doctors—not limited to any particular school. Apparently not used for cattle disease.

41. Insufficient and unreliable information.

42. There is a consensus of opinion that any use whatever of the drug is harmful.

43. Inoffensive apart from their disagreeable smell.

44. The effect is said to be refreshing and to allay hunger temporarily. It partially intoxicates. Abstinence causes great uneasiness and is difficult to practise.

45. It is accompanied by physical retrogression, and conduces to indolence. It is not thought to lead to immorality, or to seriously impair the mental powers except in so far as the physique is weakened.

47. Information meagre, but thought not to be hereditary.

48. Insufficient information.

49. Not known whether so used by prostitutes, but believed to induce impotence in males.

51. The consumption does not seem to be specially connected with the criminal classes.

53. No.

54. to 57. *Nil*.

58. The sale only is now under control. Insufficient information as to improvements desirable and possible, but it is generally thought the cultivation of the hemp plant and the manufacture and possession of the drugs prepared therefrom should be brought under thorough control, and in this opinion I concur, considering the pernicious effects of such drugs, the entire absence of check at present upon the consumption, and the consequent want of accurate information as to the extent to which they are used.

61. *Nil*.

62. *Vide* answers to question 58 *supra*.

63. *Nil*.

64. There are no restrictions.

65 to 67. No information.

68. No.

69. No information.

70. *Nil*.

31. Evidence of MR. C. BENSON, Deputy Director of Agriculture.

Oral evidence.

Question 1.—I have been twenty years in Government service. I have been Deputy Director of Agriculture (under different names) practically since 1885. I was desired by the Madras Government at the instance of the Commission to make inquiry regarding the cultivation and manufacture of ganja in this presidency. The information I collected is published in bulletin No. 29, copy of which I put in. I collected it personally. I had access to records as to the fact of where there is cultivation and also made references; but I have visited North Arcot and Kistna to investigate the facts personally. The last statement in the bulletin regarding Cuddapah is based on information found in a report.

I do not know anything of the statement of cultivation forwarded with proceedings of the Board of Revenue (Separate Revenue), No. 141 (Miscellaneous), dated 17th January 1894. I observed that the Kistna figures for cultivation are omitted for 1893-94. The area shown in my bulletin is not quite the whole (page 293). I do not think it is very much more than I have stated.

The blank of 1891-92 is possible; as this was a year of scarcity, almost famine. There was no rain, which is required for sowing. In regard to the entry of five acres against Cuddapah, it is against the information I have received as regards the Pulivendla taluk. In regard to North Arcot, the entry 207 acres is a pure estimate. There is, in regard at least to the greater part of the area, no survey. The hills are not surveyed. Assessment is by the plough. According to the information I received at a gathering of the headmen, I think 207 acres is double and perhaps four times as much as the truth.

I know the Kurnool district very well, though I cannot speak absolutely as to the areas given, and I never came across more than a few plants. I think the entries in previous years are probably a mistake. It is probably a mistake for another crop. We are gradually eliminating such mistakes by giving correcter tests.

I have no information regarding the fifty acres put down for Coimbatore.

I have no knowledge of the wild hemp growing anywhere in the presidency, except in the northern

districts, where I have heard that it grows, *i.e.*, I have seen some references to it. I cannot say whether the wild plant would produce ganja. It might if it were on rich ground. I do not see why it should not find a happy spot; but I think it would more likely be choked. I have not seen it and cannot say. By wild hemp I mean hemp growing either as an escape from cultivation or naturally. I do not know, as I have not seen it.

The decrease in cultivation referred to in the close of my pamphlet is based on information I received from growers and others on the spot as regards the area for the present year, and it is borne out for the Kistna district by the figures I had available. The area for 1888-89 was 346.52 acres; the area for the present year, according to information received, is 125 acres; but it is possible that the figure for 1888-89 was unduly swelled by including other kinds of hemp. It has been found that this mistake has been made elsewhere, and we are working to correct it.

I am afraid I cannot give any figures worth anything in regard to the outturn. We do not attempt to make estimates of outturns of crops generally. I have never seen a ganja crop harvested; and without examination on the spot the estimate would be useless. The North Arcot people said it came to about 420 pounds, and the Kistna came to about the same, I heard. But I could not test these figures.

The sporadic growth of a few plants is common only in the Northern Circars. All over the province you may find a few plants near a temple or in a garden. But it is rare, except in the Northern Circars. It would be difficult to catch one plant in a man's garden; but prohibition of cultivation would not harass the people, as those affected would be so few; and it would, I think, within a short time accomplish its object.

My ordinary work is travelling; for five years I was nearly constantly on tour. For the last three years I have been on special duty and have not travelled much. I have nothing to do with the working of the revenue administration. I have to do with agriculture chiefly. I have no direct concern with the relations between the people and the Government. I have no information of a special character regarding the agency tracts.

32. *Evidence of P. PUNDARIKAKSHUDU, Brahmin, Deputy Collector, Venukunda, Kistna District.*

2. Charas is not known here. The definition of ganja is correct. Flat and round ganja have no local name. The broken ganja is called kali.

3. The hemp plant does not grow here spontaneously. It is abundantly cultivated in Daggupad in the Bapatla taluk. None in this division.

4. It is known only by the name of ganja.

5. There is no cultivation of the plant here. It is said that it grows well in pati earth.

6. Not known.

7. There is no cultivation. A few hemp plants are grown very rarely at Narasaraopeta, and this is only in a back-yard for production of only ganja for domestic consumption.

8. None.

9. Seeds are sown in small beds in back-yards. When they grow a foot high, they are transplanted like chilly plants at a cubit's distance from each other.

10. No.

11. The wild hemp is known here as male plant, and is not used for ganja. Its seeds are sometimes mixed with the seeds of the female plant, and are therefore indiscriminately sown. When the plants come up only the female ones are used for ganja. The female ones are those that bear flowers.

12. No.

13. No.

14. Yes; ganja and bhang are prepared at Narasaraopeta to a very small extent.

15. Ganja is the mixture of the ears of the hemp plant, water, and tobacco. Mixture of the ears, water, jaggery and tobacco is called bhang. Both these are prepared here. The one is consumed at once, while the other is kept for daily use for about a week or ten days. Ganja obtained from Daggupad is sold here. The preparations of only the cultivated hemp plant are made. Ganja is used for smoking. The flower tops are powdered by the finger and the seeds are removed. Then it is moistened by a few drops of water, and then pressed under the finger and the water removed. Small tobacco pieces are then added and mixed up. The mixture is put on a chillum, in which fire is placed, when it is used for smoking.

No preparation is made from hemp plant for eating or drinking.

16. (a) Bhang is prepared generally by the consumers on occasions of festivities in their houses.

(b) Yes.

(c) No.

17. By bairagis, fakirs, the lower orders of Sudras, Muhammadans, pariahs and chucklers.

18. Yes; ganja is made for immediate use; charas is not known here. Bhang is kept on for a week or ten days, when it becomes unfit for use. It loses its force. No measures.

19. Ganja is used here only for smoking. Charas is not known here.

20. As to classes, see answer to question No. 17. The proportion is very nominal. Here and there.

21. Flat ganja. None.

22. None.

23. No.

24. None.

25. Neither.

26. There are very few consumers in these parts, and they may be said to be habitual moderate consumers.

27. *Vide* answer to question No. 20. Ganja is used as medicine for belly-ache, cough, and such like diseases. Wandering people take to it, as also people of immoral character. Bairagis take to it for purposes of devotion.

28. (a) One tola, costing 4 pies.

29. (a) See answer to question No. 15.

(b) None.

No dhatura. No bhang massala.

30. The consumption of the drugs is practised generally in company. It is mainly confined to the male sex and in middle age. Children do not consume any of the drugs.

31. (a) No.

(b) Yes.

(c) There is no tendency for the moderate habit to develop into the excessive.

32. The gosains and bairagis, who profess to be religious devotees take to the practice. Yes. Temperate. Yes; it is believed to be injurious.

33. As derogatory to rank and injurious to health. The social and religious opinion is strong against the practice. The disrepute is because of the intoxication brought on by the practice, and its concomitant evils, affecting the sobriety and health of the consumer.

34. It is believed that the privation of the drug does not so seriously affect the consumers as in the case of opium eaters. There are some 30 consumers.

35. (a) Yes.

(b) Perhaps occasionally.

(c) Enforced by legal enactment.

(d) and (e) No.

(f) I do not think.

36. No.

37. Charas is not known here.

38. Only flat ganja is here.

39. So it is believed.

40. Yes; for belly-ache, etc. No.

41. (a) I think not.

(b) I think not.

(c) I think not.

(d) No; on the other hand, I am inclined to think that the use of the drugs weakens one's constitution and affects his health in course of time.

42. Except in so far as it affects the brain in a measure.

43. Yes.

44. A sort of pleasure. It is refreshing for a time. Yes; for a while. It does not create appetite; on the other hand, it deprives one of appetite. It lasts for three hours. No.

45. (a) I think it does.
 (b) Yes.
 (c) Yes.
 (d) No.
 (e) Yes.
 (f) Deadens the intellect, but does not produce insanity.
46. The moderate use brings on mischief as above, to say nothing of the consequences of any excessive use.
47. No.
48. I can give no opinion.
49. I have not heard of any case. I do not believe; it does not cause impotence.
50. I can give no opinion.
51. No. None.
52. None.
53. No. No.
54. I do not think so.
55. No; I think not.
56. The admixture of *ummetta kaya* (dhatura) increases intoxication. This is not resorted to here.
57. Ganja and charas are not eaten or drunk here.

58. Yes; working well. The sale of ganja is regulated by the issue of licenses. No licenses are issued in this division for drugs. In the former case, only two licenses have been issued in this division, one at Narasaraopeta, and the other at Dachapalli.

60. There is no cultivation here of the ganja-bearing plant, so to speak. A few plants are raised occasionally in a back-yard. No modification of the system seems called for.

61. Charas is not known here.

62. No.

63. None.

64. None.

65. (a) Only ganja is taxed here by the exclusive right of its sale being sold to one or more persons. The tax on ganja is reasonable.

66. I do not recommend different rates.

67. None.

68. None.

69. No; the information as to the necessity of a shop is gathered from the number of consumers through the tahsildar of the taluk. It is unnecessary here to consult local public opinion as the consumers are rare.

70. None.

33. Evidence of D. JAGANNADHARAO PANTULU, Brahmin, Deputy Collector, Anantapur.

1. My information was obtained from my subordinates, men selling the ganja, and the medical officer of Anantapur.

2. Bhang, as herein defined, is not used in this part of the country by human beings, but administered to cattle if they become troublesome at the time of milking. Charas is not prepared here separately, but allowed to remain as part of ganja. Rightly described here. In this district this drug is called ganja by Muhammadans and bhang by Hindus. But from my knowledge and that of the medical officer, bhang is a preparation of the dried flower tops of the plant ground after the seeds, leaves and stalks are removed, and then mixed with condiments, sugar, and milk or water and drunk by the people. This flower top is also called by natives kali. Of the other products, bhang is called bhang, and charas is not known here.

3. This plant does not grow spontaneously anywhere in this district. The plant grows spontaneously in the hill tracts of Ganjam and Vizagapatam, and to some extent on the Rumpa side in the Godavari district.

4. It is called ganja or bhang tree; but by some religious fanatics who use or consume the plant it is called sudhapatri (pure leaf), gnana-patri (wisdom leaf), or alwar, sivapatri.

5. Not known.

6. Dense.

7. Yes; it is cultivated to a very limited extent for production of ganja for smoking only here, and for smoking and drinking to a very limited extent in the northern districts of the presidency.

8. Neither increase nor decrease.

9. Seeds are sown here and there in gardens and watered once or twice a week, but by some fanatics very rarely. The tree, when it is ripe, is somewhat twisted round, and at the bottom the

stem splits, in which a little opium is inserted perhaps with the object of making ganja or bhang more narcotic.

10. No special class and no special attention paid to the matter. Ordinary agricultural cultivators cultivate it.

11. No.

12. I have no knowledge of this. Generally the male plant is extirpated at the flowering season.

13. Not restricted. Cultivation common to all districts. Not known.

14. To a very little extent consumers prepare ganja.

15. (a) Ganja for smoking is prepared from the cultivated plant, by removing the seeds and stalks and rubbing it with water and rarely with milk in the palm of the left hand with the thumb of the right till the mass becomes little tenacious and then smoked.

(b) Ganja, known under the name of majum, is a confection, and is mixed with condiments and sugar and preserved for some time for eating.

(c) Ganja for drinking, known under the name of bhang, is prepared from the dried flower tops ground after removing the seeds, leaves, and stalks, by mixing with condiments, sugar and milk or water.

16. The aforesaid bhang is prepared in their houses and wherever the plant is grown. Not known.

17. All classes prepare and use the drug.

19. Charas not used at all. Ganja is used in three different ways, as enumerated under question 15, chapter III, smoking, eating, and drinking. Smoking only is in use in this district.

20. Generally bairagis or religious mendicants that come from Northern Hindustan smoke ganja, but very rarely others use ganja in this country. The proportion is but a trifle.
21. Flat and round ganja are both prepared and used for smoking.
22. Not used.
23. Bhang as defined in section 2, chapter I, is not used for smoking.
24. Nobody uses it here.
25. No increase or decrease.
26. The consumers themselves form a very insignificant proportion, and no details can consequently be given.
27. Information not available.
28. Habitual or moderate consumers may use one tola worth, about 3 pies a day, and excessive consumers double that quantity.
29. (a) Ordinarily tobacco, and (b) exceptionally opium, and very rarely dhatura are used to increase intoxicating effects. No.
30. Used in company by low mendicants. Never used by females. Confection of ganja known as majum is given rarely to infants to induce sleep at nights.
31. The habit is not easily formed, and, when once formed, it is difficult to break it off, and there is a tendency for the moderate habit to develop into the excessive.
32. There are no such customs existing in either this or other districts with which I am acquainted.
33. Public opinion regards the consumption with contempt on account of its intoxicating and slightly demoralising effects. No such custom to my knowledge.
34. It would be a serious privation to consumers in large quantities, because the privation brings on restlessness, indigestion or other complaints. Such people are almost *nil* in this district.
35. It would be feasible to prohibit the use with some difficulty. The drug would in that case be consumed illicitly, and the prohibition can be enforced by prohibiting the cultivation of the plant and the import of the drug. It would cause discontent among the consumers to some extent, but no political danger need be apprehended. The prohibition would to some extent be followed by recourse to toddy and country grog and other deleterious drugs prepared of dhatura and nutmeg.
36. No.
37. Charas is not used in this part of the country.
38. The round and flat ganja are preferred by people to chur, which is not independently used here. The effects of the two former are supposed to be the same, and considered superior to chur.
39. Smoking has a less injurious effect than drinking or eating, inasmuch as the latter two keep the consumer under intoxication for a longer time.
40. Yes; prescribed by native physicians. Not known.
41. The use of charas is not known. Limited use is considered beneficial by a few as digestive.
- (b) Alleviating fatigue.
- (c) As preventive of diseases in malarial and unhealthy tracts.
- Those that use it here, being but an insignificant number, cannot be grouped into classes. Moderate habitual use is the one referred to above.
43. Yes; inoffensive.
44. It is refreshing and stimulating and produces mild intoxication. It does not allay hunger, but it makes a man indifferent. Creates appetite. The effect lasts about four hours in smoking and double that in eating and drinking. The after-effect is depression of spirits. The want of subsequent gratification produces uneasiness and restlessness.
45. (a) After some years' use the physical condition suffers, not mental or moral.
- (b) and (c) Impairs the constitution. After long use it affects the digestion and causes loss of appetite.
- (d) No.
- (e) It does not impair moral sense. Induces laziness, but not habits of immorality or debauchery.
- (f) I have no special knowledge.
46. Habitual excessive use affects a man in a short time, makes him impotent, emaciated, and may probably become insane in the end.
- 47 and 48. Not known.
49. The confection of ganja called majum, described under question 15, is used as an aphrodisiac. It is not known whether prostitutes use it or not. It is more injurious as an aphrodisiac than its use as a narcotic, as in the former the man dissipates himself. The use of hemp after some years tends to produce impotence.
50. In excessive use it is not used as an aphrodisiac, but simply as narcotic. It produces impotence.
51. Not here.
52. Not here.
53. There was a *dalayet* in the Head Assistant Collector's office, Anantapur. He was, before he became a *dalayet*, a sepoy, but retired from the military profession. He was indulging in it. He appeared to be very quiet; but all of a sudden he killed one Dadagadu with his stick, who was passing along the road in Anantapur town.
54. No.
55. Not to my knowledge.
56. Ganja is used alone for smoking in excess. In moderation it is mixed with tobacco. For eating and drinking it is always mixed with other substances, as explained under question 15. Dhatura is not mixed in this part of the country.
57. Charas is not used. In moderate doses it is said to be stimulant and mildly intoxicating. In excessive doses it is narcotic, and the consumer labours under a semi-conscious condition.
58. Capable of improvement.
59. At present persons buy ganja not only from the licensed vendor, but also from others who are either cultivators or middlemen. The sales, except by licensed vendors, should be stopped.
60. There is no control at present. Cultivators give ganja to consumers either gratis or sell the same with impunity. Its cultivation should be restricted, except by persons licensed to cultivate it; otherwise there will be illicit cultivation and sale.
61. No charas produced here.
62. Bhang, as described in question 2, is not produced here.

63. There is at present no difference observed between wholesale and retail vend, and I think there need be no such difference, as the transactions in this district are very little. But the cultivation and sale by others than licensed persons should be stopped.

64. Neither exports nor imports here.

65. At present fees are collected from vendors licensed to sell ganja, which seems reasonable. The present fees may be continued, but unlicensed sale must be stopped.

66. Not necessary.

67. None.

68. There is a shop licensed in Anantapur town for sale, but the consumers are not allowed to use the drug within the premises of the shop. This should be continued.

69. The wishes of the people are not consulted before the opening of a shop; but I think they as well as local public opinion should be consulted.

70. None. Cultivators use untaxed ganja and sell it to licensed and unlicensed persons either for consumption or for sale. Licensed vendors get it from cultivators and sometimes from middlemen and sell it in their shops.

34. Evidence of W. VENKATAPPIAH PANTULU GARU, Brahmin, Deputy Collector, Chatrapur, Ganjam.

1. I enquired of the sellers, cultivators, eaters, smokers, and drinkers of ganja, bhang, majum and hemp plants in Chatrapur, Berhampur, Injili and Aska, on the 9th, 10th, 11th and 12th November 1893, having only returned from leave on 1st November 1893. My information is based upon the custom prevailing generally in this district, and particularly in the above places.

2. The definitions may be accepted with the following modifications, viz.:—

Charas and round ganja are unknown here. Flat ganja and bhang are locally known to be kali and siddhi or patti respectively. Chur is also known to consist of the fallen pieces of kali and leaves in the course of the preparation of ganja which is not made by treading under foot, but by pressing under the weight of a heavy flat stone.

3 to 6 No wild plant grows here spontaneously.

7. In this district the cultivation is made for (a) and (c) only.

9. In the month of July seed beds are first grown, and after 15 days or so when the plant grows four inches high, it is transplanted at two in each bed. As soon as the hemp plant grows big, its large leaves are removed. Ass dung and red-earth are put in the beds of plants. The ends of the plant are also removed. During its growth, its trunk will be split three or four inches above its bed and a piece of tile invariably and some opium also sometimes will be stuffed into it. This portion of the trunk will be bandaged. It will also be twisted before the kali or the flower top begins to ripen.

10. There is no special class of persons who cultivate the plant for its narcotic products. All classes of people do it. Cultivators grow the plant in sugarcane, tobacco and brinjal gardens. The cultivators of this plant are of the same classes as other agricultural cultivators.

11. No.

12. No.

13. There is no restriction for the cultivation of the hemp plant. It is grown everywhere. If the land on which the plant is cultivated is of gravel and dry soil, the plant will grow luxuriantly. The plant flourishes well in the hills under morning dew. Too much rain injures the plant. The trees are grown apart from one another so that the boughs of one may not touch those of the other. *Vide* also answer to question 2.

14. The following products are prepared in this district:—

(a) Ganja { Prepared to a limited extent in the hills and plains of this district for the most part in back yards.
(c) Bhang }

Charas is not known in this district.

15. There is no wild plant. From the cultivated plant—

(a) Ganja is prepared for smoking. In the month of January when the plant is ripe it is cut down and the branches are pressed under the weight of a heavy flat stone for three days and then exposed to the sun and night frost for three days over the roofs of the houses, and finally kept under beds or mattresses on which people lie down for three days. By this process ganja or kali is formed. In the course of the above three processes, broken pieces of ganja and big leaves fall down which are separately preserved for chur and bhang, or subji or patti respectively. The kali so prepared is used for smoking with the use of an earthen pipe locally called chillum.

(b) *Eating*.—Chur is used for eating in the shape of round balls called majum. The chur is dried and powdered together with dried ginger and spices, such as cloves, cinnamon, nutmeg, etc., and put in a pan of boiled jaggery or sugar mixed with ghee, and stirred round repeatedly till the whole stuff gets cool and condensed, when it is made into small balls of marble size. These balls are swallowed by themselves.

(c) *Drinking*.—The aforesaid big leaves, i.e., subji or patti, are boiled in water and then dried in the sun and powdered. This powder is mixed with the powder of pepper, aniseed, poppy-seeds, cloves, nutmeg, etc., and is then ground soft with water, and the whole mass is well mixed in a quantity of water and strained in a piece of cloth. The remnants in the cloth are thrown away and the liquid so filtered is drunk with or without sugar. This drink is locally called bhang.

Kúsumba is a refined preparation of bhang consumed by wealthier classes.

Madankameswaram is a refined preparation of majum made by native physicians for the use of higher classes.

16. (a) Bhang is generally prepared by the people in their houses.

(b) Yes.

(c) Wild plant and charas are unknown here.

17. By all if they are accustomed.

18. Not for a year if properly preserved. It will lose its effect in time, 18 months at the utmost, if the plant was not injured by rains, which affect its efficacy. No special measures can be taken to prevent deterioration. Old drugs are preferable to new ones on medical grounds.

19. Ganja only is used for smoking.

20. Cannot be said approximately; probably 5 per cent. of the population use the drug in its various forms. There is no special locality for its use.

22. Unknown in this district.

23. No.

24. People for the most part drink bhang. Very few eat it in balls before being mixed in water or milk. Classes and localities are not restricted. Proportion cannot be ascertained.

26. The majority are habitual moderate consumers. Bairagis are chiefly habitual excessive smokers of ganja.

28. Average cost for—

(a) is $\frac{1}{2}$ pice.

(b) is 1 pice.

29. Dhatura is never used. Bhang massala is mixed with these drugs as stated in dealing with question 15.

30. Cannot be said, mainly consumed by male sex, never used by females and children.

31. Yes. It is difficult. No such tendency.

32. Bairagis invariably smoke ganja. It is regarded as essential with their religious custom. Uriyas drink moderately bhang on Sankranti day after offering to goddess. It is not known that this custom has ever led to the formation of the habit or otherwise injurious.

33. There are different opinions in regard to how the consumption of each of these drugs is generally regarded. Bairagis prefer smoking ganja to other drugs. The hemp plant is not worshipped. A few of bairagis and sanyasis offer bhang to Hanuman and drink.

34. Yes, especially to bairagis.

35. No, not feasible. Yes, it is consumed illicitly. Yes, the prohibition will cause serious dis-

content among consumers. Such discontent does not amount to a political danger here. The prohibition will not be followed by recourse to (a) or (b).

36. No.

37. Not known in this district.

38. Intoxication by smoke lasts for an hour. It begins immediately. Intoxication by bhang begins after an hour and lasts for two or three hours. There is no difference in the quality of intoxication.

39. No.

40. Yes, it is prescribed for the cure of cough, jaundice, etc. The drugs are also used in the treatment of diseases of horses and elephants only. Whether they are used for the treatment of cattle or not, it is not known.

41. Yes, the moderate habitual use of ganja, majum, or bhang is beneficial to—

(a), (b), (c) and (d) in the prevention of cough and other complaints due to change of water and climate.

All classes of people use the drugs.

43. Yes, they are inoffensive.

44. See answers to questions 41 and 38. It produces intoxication. It is refreshing. It does allay hunger. A man who uses these drugs cannot work without them after their effect has abated. There is a difference of opinion as regards the effect of moderate use. Consumers say in the affirmative, while others negative it.

51. Any large proportion of bad characters are not habitual moderate consumers of any of these drugs. Those who drink liquor and maddat are bad characters. The moderate use of these drugs has no connection whatever with crime in general or of any special character.

52. The excessive use of these drugs also has no connection whatever with crime of general or special character. The excessive consumers are not bad characters.

53. The excessive indulgence in any of these drugs does never incite to unpremeditated crime, violent or otherwise. None of the persons whom I have consulted know any case in which it has led to temporary homicidal frenzy.

54. It is said that drugs are never used by criminals to fortify themselves to commit a premeditated act of violence or other crime.

55. It is said that criminals never, in order to further their designs, induce their victims to partake any of these drugs and so stupefy themselves. Complete stupefaction cannot be induced by this drug without admixture.

35. Evidence of M. R. R. DEWAN BAHADUR S. VENKATA RAMADAS NAIDU, Deputy Collector, Godavari.

1. I know nothing personally about ganja, but after the receipt of proceedings of the Board of Revenue No. 394, dated 2nd September 1893, I have gathered some information about it which I think it necessary to bring to the notice of the Commission.

2. Of the several drugs referred to in this, charas is unknown here except in name; it is understood to mean the resinous exudation of the hemp plant (*Cannabis sativa*). Here the leaves of the plant are not called bhang. It is, in this country, the name given to a beverage prepared with those leaves. The definition of ganja holds good here. The three varieties of ganja referred to in this are

known here, their local names are noted below :—

	Local name.
Flat ganja	Madras ganja.
Round „	Daggupadu ganja.
Chur „	Silavati.

3. The hemp plant does not grow here spontaneously. It is not cultivated here for purposes of trade, but a solitary plant or two may be found in the back-yards of a few persons; but, as it is believed that the stuff grown here possesses narcotic properties only in a small degree, consumers generally prefer the stuff sold in the bazar, which is imported from Daggupadu, a village in the Kistna district, where it is grown extensively.

4. It is known only by one name, *viz.*, Ganjaya chettu (tree).

6. I have no information about the growth of the wild hemp.

7. *Vide* my reply to question 3.

14. Yes, ganja and bhang; the latter is used by me in the sense that I have referred to in reply to question 2. These are prepared at home and for the consumption of the person that prepares it. Bhang cannot be had for sale, and the ganja available for sale is imported from Daggupadu.

15. I can give no information about the wild plant. All that I state below refers to the cultivated plant.

Ganja.—The flowering tops of cultivated female hemp plants called locally *kali* are dried, and this dried substance is known as *ganjaya*. It is smoked here, but not without an admixture. People believe that unmixed ganja induces pulmonary disorders. The method in vogue here is to rub a small quantity of *ganjaya* in the palm of the hand, wash it thrice with water and mix with it a varying quantity (generally equal) of tobacco and smoke the resultant in an earthen pipe called *chillum*. It is also eaten here, but not without an admixture. It is either made into *majum* or mixed with medicinal syrups called *halvas*.

There are three kinds of *majum* sold in the bazars.

One method.—*Ganjaya* is well fried and pulverised, and then mixed with the powder of dried ginger, *pippali* (long pepper) and other medicinal herbs and boiled with sugar treacle and allowed to cool.

Second method.—*Ganjaya* and milk are boiled together and cooled down and then mixed with buttermilk so as to curdle it. It is then churned and the butter separated and clarified so as to get what is called *ganja ghee*. This is boiled with sugar treacle and the powder of pepper, long pepper, ginger, etc.

Third method.—*Ganja* is pounded and boiled with water and ghee and the scum gathered and strained through water. The resultant is mixed with pepper, etc., as stated above.

Halvas.—*Ganja* is boiled with water and ghee until it becomes a thick liquid called *ganjaya decoction*, and this decoction is mixed with medicinal syrups called *halvas*, which native doctors ordinarily make and prescribe.

It is also drunk here and the beverages prepared with it are called *bhang*. These are of two kinds:—*Water bhang* and *milk-bhang*. The method of preparing the two varieties is one and the same, except that in the case of the former, water is used in lieu of milk, which is the chief ingredient in the latter.

Ganjaya or sometimes the leaf of the hemp plant is well ground with a little water on a grindstone, strained through cloth and then mixed along with sugar in cold water or boiled milk spiced with cardamoms, cloves, *marati-moggalu* and other aromatic substances. The quantity of the *ganjaya* or the leaf of the hemp plant used depends upon the strength required for the beverage; Ordinarily four tolas are mixed in an imperial seer of water or milk.

16. Bhang in the sense I use is always prepared by the consumers in their houses. As I have already stated, it can be prepared both from the flowering tops called *ganjaya* and from the leaves of the cultivated hemp plant. I have no information about the wild plant. Bhang does not keep long and is prepared whenever required.

17. All classes of natives from Brahmins down to Pariahs, Muhammadans, especially fakirs and the bairagis of Northern India that come here, smoke *ganjaya* for its narcotic properties; but as it is held in disrepute, respectable people seldom do it.

All natives who use native medicines have no objection to eat *halvas* into which *ganjaya* enters. Bhang is drunk here very sparingly. *Bondilis* use both milk-bhang and water-bhang at the ceremonial called *Kamadahanam* and at other times for pleasure. The other classes drink it only for pleasure.

18. Bhang deteriorates by keeping. It does not keep for more than a *jhamu* (3 hours), even when good care is taken of it; after that period it does not quite lose its effect, but it loses its relish and more than three-quarters of its intoxicating effect. Exposure to the atmosphere is the chief cause of its deterioration. The liquid suffers also by non-exposure, as it putrifies and gets sour.

Ganja does not deteriorate by keeping. It may be kept for three years without losing its value.

Majum and *halvas* keep for one year and more.

19. Charas is unknown here.

Ganjaya (flowering tops) is used, as already stated, both for smoking and for making *majums*, *halvas* and the beverage called *bhang*. *Majums* are prescribed by native doctors for chronic dysentery, diarrhoea and as prophylactic against cold, fever, etc., resulting from differences in climatic conditions, changes in temperature, and rheumatic affections. Bhang is refreshing and is slightly intoxicating. *Halvas* are eaten to promote digestion and to increase the appetite.

Majums and *halvas* are prepared at all places. The leaf of the hemp plant is believed to possess some medicinal value and is prescribed in the treatment of piles and diseases of the eye. It is mixed with ghee and used as a poultice.

20. All classes of natives and Muhammadans, fakirs, *Bondilis* and *Bairagis* especially smoke *ganjaya*. The proportion of the people using it is not less than 1 per cent. of the population.

21. Round ganja is preferred, but as it cannot be had here always, flat ganja is used, *vide* my reply to question 2.

22. None is used here.

23. I cannot understand how a liquid can be smoked; probably the word *bhang* as used in this question means a dry preparation of the leaf. If so, such bhang is not known here. The bhang as understood here, is used by 1 per cent. of the population.

24. *Vide* my answer to questions 17 and 20.

25. The use of *ganjaya* and bhang is neither on the decrease nor on the increase. There would certainly have been a material decrease, but for the stupid belief, fostered by the bairagis of Northern India who come here in swarms, that indulgence in it gives one a philosophical turn of mind. This is why *ganjaya* is colloquially termed *Gnanapatram* (leaf of wisdom.)

Ganja.	Bhang.
(a) $\frac{1}{2}$ per cent. of the population.	<i>Nil.</i>
(b) $\frac{1}{4}$ per cent. of the population.	<i>Nil.</i>
(c) $\frac{1}{4}$ per cent. of the population.	1 per cent.
(d) <i>Nil.</i>	<i>Nil.</i>

27. Bairagis contribute most to class (b) under ganja. They believe that its use makes them wise by extinguishing in them all passion for sexual pleasures. All classes of natives residing in these parts represent class (c) and the remainder under class (b) in ganja. Class (a) under ganja is represented by Muhammadans, pariahs and lower classes of Hindus. These people contract the habit on the advice of native doctors and by association with bairagis and other ascetics. Bondilis, pensioned sepoys, Dommaras and other wandering tribes contribute to class (c) under bhang. These people acquire the habit by bad society and on account of occasional indulgence, as in the case of Bondilis, as a religious drink.

People that have a sickly constitution and that can ill afford to get proper medical advice and that have bad society, get into these practices.

28. Habitual moderate consumers of *ganjayi* use every day about 2 tolas of the stuff referred to in my reply to question 15, and its cost will be about 7 pies, of which 3 pies relate to ganja and 4 pies to tobacco, etc. Habitual excessive consumers use every day twice the above quantity. Occasional moderate consumers of bhang use half a seer of the bhang prepared in the manner described in my answer to question 15.

29. *Vide* my answer to question 15. Dhatura is never mixed here with ganja. *Bhang massala* is not sold in the bazar, but a preparation of cardamom, nutmegs, pepper, *Kunkumapuvvu* (saffron), *patcha karpuram* (fair-coloured camphor), etc., is the powder usually mixed in the beverage of bhang.

30. Ganja is smoked publicly in bairagi mat-tams and such other places. Company is preferred to solitude. At home it is smoked stealthily, but even there company has its fascination. It is confined exclusively to the male sex. Females never use it.

Bhang is always drunk in company; males only drink it and females seldom do so.

31. The habit of consuming these drugs is not easily formed, as it does not agree with any but persons of phlegmatic temperament. It is not difficult to break off the habit before it becomes excessive, but when it becomes excessive, it becomes second nature.

32. There is no custom, social or religious, in regard to ganjayi, but in regard to bhang, the Bondilis have a religious custom to which I have already referred in my answer to question No. 17.

33. The consumption of the drug is regarded with disfavour; there is a public opinion about it, and it deprecates its use and looks upon its devotees as people unworthy of good company. Society shuns them, and no respectable man uses either ganjayi or bhang openly, and if he should do so, he becomes at once a marked man.

The use of the drug is certainly in disrepute as it is believed to indicate low society, unsteadiness of character, want of assiduity, and general incapacity for any intelligent work or sustained effort.

The hemp plant is not worshipped by anybody in this part of the country.

34. No, except to bairagis, who are excessive consumers of ganjayi, but their number is so small that the inconvenience arising from the prohibition of its consumption is practically very little. The number of these bairagis will be about 10,000.

35. It is not worth while to prohibit the use

of ganjayi and bhang, but it should be restricted; there will be no illicit consumption of the drug, no private discontent among the consumers, nor any public danger, social or political.

I think that such a prohibition will not be followed by recourse to alcoholic stimulants or other drugs.

36. No; the effects of alcohol are different from ganja—one leads to excessive indulgence in sexual pleasures, while the other has a diametrically opposite effect and makes a man impotent; one makes a man a ruffian and the other a timid fellow. There is a Telugu saying which, when translated into English, runs as follows:—

Ganjayi is timid, opium is sleepy, arrack is murderous.

38. Yes; round ganja heats the system and is more intoxicating. Flat ganja is of moderate strength, and neither heats the system nor intoxicates a man too much. Chur is useless stuff, and is used only in the Agency tracts; it is not liked much by the people here.

39. Smoking heats the system, while eating and drinking it cools the system. To a sickly man smoking does more good, but to a healthy man eating and drinking does more good. As healthy people use it only for pleasure, it must be said that smoking does more good.

40. Yes; *vide* my reply to question 19. Ganjayi is used very sparingly for cattle diseases.

41. (a) Both ganja and bhang promote digestion.

(b) Ganja gives no staying-power while bhang gives it.

(c) Ganja is considered a prophylactic, but bhang is a febrifuge and is used in cases of fever and ague.

(d) Both majums and halvass are used as medicine.

(1) Sickly and dyspeptic people use the drugs for this purpose.

(2) Coolies use bhang.

(3) People in malarious places use the drugs in this manner.

(4) All people treated by native doctors know this.

42. No; except by way of medicine. Ganja is a medicinal plant and has medicinal value.

43. Most certainly; they are very timid people (*vide* my reply to question 36).

44. It relieves suffering by producing intoxication. It is refreshing and creates appetite. Its effects do not last longer than three hours. It has no after-effects. Want of subsequent gratification does produce uneasiness and a desire to use it.

45. *Physical*.—Moderate use does not impair the constitution; it does not injure the digestion; unmixed ganja produces cough, but the prepared one cures asthma, bronchitis, etc.

Mental.—It does not deaden the intellect though it makes him lazy; excessive use does lead to temporary insanity, but moderate use does not do it. The first symptom of insanity is worldly renunciation; there are no typical symptoms. I know nothing about the confessions of insanes.

Moral.—A consumer of ganja becomes impotent and never immoral. It is consumed to extinguish sexual desire.

I know of no cases of insanity.

46. *Physical*.—Excessive use impairs the constitution, increases the bile, and weakens the nerves.

Mental.—May produce insanity; deadens the intellect.

Moral.—Becomes impotent.

47 to 50. No.

51. Ganja has nothing to do with crime. A ganja-man is a timid fellow.

53 to 55. No.

56. The bad effects of ganja will be neutralized by the admixture of tobacco, etc. The admixtures are intended to moderate its intoxication.

57. *Vide* my reply to question 19.

58. Yes; it is working well.

59. The cultivation or importing of ganja even for private consumption may be prohibited.

62 to 64. No.

65. Yes.

66 to 68. No.

69. No; none; not necessary.

70. None.

36. *Evidence of* DEWAN BAHADUR K. V. LAKSHAMANA ROW GARU, *Brahmin, Deputy Collector, North Arcot.*

1. My answers are framed on the reports sent from my subordinates, and also on enquiries made of the people by myself.

2. I have no remarks to offer on the definition of the term. Ganja is the only preparation made here from hemp plant, and that flat ganja.

3. There is no spontaneous growth in this division.

4. It is known locally as ganja plant.

5. No growth of wild hemp in the division.

7. (a) Yes.

(b) *Nil*.

(c) *Nil*.

(d) *Nil*.

About 200 acres annually on the Javadi hills in the Polur taluk.

8. There has been a considerable decrease in the area under cultivation subsequent to the introduction of the excise system. Malayalies, who are the hemp cultivators, are illiterate people confined to the Javadi hills. Prior to the introduction of the excise system, the cultivators were selling freely and making good profits. Now that the sale is restricted to licensed vendors, who are few and far between, the vendors offer the cultivators their own prices, with the result that the price of the commodity has considerably fallen, and consequently there is decrease in cultivation.

9. The soil is well ploughed and manured. The seeds are sown in rows. The sprouts shoot up in a week, and when the plants grow to a height of one foot, the ground between the rows of plants is again ploughed, and the loose earth filled against the stems to stimulate the growth. This process is repeated three or four times at intervals of eight or ten days. When the plant becomes four months old, the female plants (so the Malayalies assert) are extirpated. The female plants are distinguished by the smallness of their blossoms.

10. They don't form a special class. All Malayalies cultivate it.

11. No.

12. Not in this division.

13. It is not restricted; but it is not common to all parts of the division. It is only cultivated on the Javadi hills. Extreme cold or hot weather said to be injurious to the growth, as well also high winds. The plant finds a luxuriant growth on the hills, where the soil is generally red loam, richly impregnated with vegetable manure. It also requires a loose soil retaining some moisture.

The cultivation of the plant appears to have been tried with success at the foot of the hills too.

14. Only ganja at the Javadi hills to an extent on an average per year of 1,500 to 2,000 maunds.

15. Method of preparation of ganja. The blossoms are detached from the plants and dried up in the sun for about ten hours, after which they are collected in a heap and squeezed between the thumb and the finger. This process over, a small quantity of the dry leaves of the plant powdered is sprinkled over the bottom of a bamboo basket, specially prepared for the purpose, over which a quantity of the squeezed flowers is put and trodden under foot. Over this layer a quantity of powdered leaves is again sprinkled and squeezed, flowers again placed and trodden, and so on, till the basket is filled. After this the basket is laid upside down over a smooth but hard ground, besprinkled with the powder of the leaves, and the basket removed, the trodden cakes of ganja being left on the ground one over the other. On the topmost cake a flat stone is placed, and over it other stones are piled up; so that there might be sufficient weight to press the cakes as hard and tight as possible. The weight is allowed to stand for about fifteen hours, after which it is removed and the cakes detached. The cakes are then broken into small ones and again trodden under foot and then dried up in the sun. When the cakes become sufficiently dry, they are removed into the houses and piled up. The ganja so prepared is generally used for smoking purposes mixed up with tobacco.

17. By the cultivators themselves.

18. Ganja. It does. It loses its effect by lapse of time. It keeps good for one year under ordinary care. Dampness and exposure to smoke form the deteriorating causes.

19. Ganja is generally used for smoking, occasionally for eating, mixed with jaggery.

20. Muhammadan bairagis, irulars, and some low caste people. The proportion or the special locality could not be ascertained.

21. Flat is generally used for smoking.

25. No perceptible increase or decrease in the use of ganja is observable.

28. (a) $\frac{1}{4}$ of a pallam.

(b) $\frac{1}{2}$ of a pallam.

29. Tobacco is ordinarily used with ganja for smoking purposes and jaggery for eating purposes. No information about admixture of dhatura. Object of the admixture not well ascertainable.

30. Ganja is smoked both in solitude and in company. It is not confined to the male sex or any time of life. Children take ganja in the form of majun.

33. Use of ganja is socially held in disrepute. It is considered a moral depravity.

40. Yes; native doctors prescribe ganja for weak children for medicinal purposes and also for cattle.

51. No. None.

53. None that I know of. I know no such case.

54. No.

55. Yes; occasionally. Yes; without admixture.

58. The present administration calls for no remarks.

60. There is no control at present, nor does it require any.

63. None.

64. None.

65. I have no suggestion to make.

67. None.

68. There is one retail ganja shop at Arni, where ganja is sold, but not consumed in the premises.

69. Yes; the local revenue officers generally make the enquiry in consultation with the police. The public should be considered.

37. Evidence of M. AZIZUDDIN, SAHIB BAHADUR, Deputy Collector, North Arcot.

1. Personal experience and information collected from Tahsildars.

2. As in Northern India, in this province also three narcotic articles are obtained from hemp, viz. :—(1) bhang; (2) charas; (3) ganja.

(1) Bhang is known in these parts by the name of subzi also. Fakirs style it sometimes as fareed-buti and also ashakanibuti, which means the love-plant. Out of bhang several preparations are made. These are—

(i) *Pannia*.—This is a mixture of bhang, pepper, and ginger.

(ii) *Majun*.—This is a mixture of ganja leaves, jaggery, and poppy.

(iii) *Phakki*.—This is a mixture of chick pea, parched rice, sugar, and ganja leaves.

(iv) *Poornadi*.—This is also a preparation like majun.

(2) Charas is the exudation of the flowers of hemp collected with the dew, and prepared for use as an intoxicating drug.

(3) Ganja consists of the dry flowering tops of hemp. In these parts flat ganja or ganja compressed into flat sheets is alone exposed to sale. Broken ganja, which in Northern India is called chur, is in these places known as gurtha.

A mixture of toddy and ganja powder is also used in some places of the presidency and is called Lurki.

3. Hemp plant is grown, it is said, spontaneously on the Javadi hills in North Arcot district.

4 to 6. Information is not available.

7. Hemp is cultivated in this division in Avala-palli and Sadam, situated within the limits of Pungazur zamindari only. The extent is very limited, and it is planted only in back-yards.

8. No increase in the extent cultivated.

9. Dry lands are ploughed four or five times and manured, and then the seeds are sown broadcast. The plants entirely depend on dew. The cultivation is generally carried on in the month of October or November, and harvested in January or February. No second crop is cultivated. No cultivation is carried on in wet land, nor are the plants transplanted.

10. The persons who cultivate hemp plant are of the same class as other agricultural classes.

11. Not done in this division.

12. No.

13. No such restriction is known in this division. The climate must be cold and snowy. There are no parts in this division where the cultivation of hemp would be possible.

14. Bhang alone is prepared in this division. The extent is not known.

15. Wild hemp plant is not known in these parts.

(a) Hemp is smoked in following ways. Tobacco and ganja are well mixed together, and smoked through a pipe, or a hukkah.

(b) It is eaten in the shape of majun, phakki, and poornadi.

(c) It is drunk in the shape of pannia, lurki, and bhang. The mode of preparing these intoxicants is given against question 2.

16. Bhang is prepared in the houses. It can be prepared from the hemp plant wherever grown.

17. By all classes who consume the preparations of hemp.

18. Ganja, charas and bhang deteriorate by keeping. Ganja, detained for a year, loses its effects, and towards the end of the second year, loses all its effects. For four or five months it can be preserved, if carefully kept without being exposed to air. Exposure to air deteriorates it. It should be kept in an air-tight place.

19. Ganja is used for smoking as well as eating.

20. Some of the Rajputs, Mahrattas, Muhammadans and Sudras smoke ganja. Charas is not prepared and used in this division.

21. Flat ganja alone is available here and is used.

22. Charas is not used in this division.

23. In these parts the leaves of hemp plant or its flower tops go by the name of ganja. Bhang is the name given generally to the preparation made by the mixture of ganja and jaggery. Bhang is not used for smoking.

24. Bhang is generally drunk by Mahrattas and Rajputs. It is not eaten.

25. Is on the increase, this drink being cheaper than that of liquor.

26. (a) About 75 per cent.

(b) About 15 per cent.

(c) and (d) About 10 per cent.

27. Bairagis, fakirs, Rajputs, Muhammadan mendicants and some Sudras smoke ganja and drink bhang and eat other preparations made from the hemp plant to keep themselves in a state of intoxication, to prevent the evil effects of water, to keep the body warm, and to endure hunger. They say by smoking ganja they don't feel the effects of appetite, and that it increases manhood.

28. (a) 3 pies.

(b) 6 pies.

29. (a) Jaggery, ghee, milk, sugar, chick pea, parched rice, tobacco, poppy are ordinarily used as ingredients.

(b) Dhatura, jaggery, ghee, milk, chick pea and parched rice are used to lessen the bitterness of the hemp leaf. Tobacco and dhatura are used to increase the intoxication. Nothing like bhang massala is sold in the bazar.

30. The consumption of bhang and ganja is practised generally in company, and is confined to male sex. Children of fakirs and bairagis of about seven or eight years of age also smoke ganja.

31. The habit of consuming ganja and bhang is easily formed. It is difficult to break off. There is a tendency to develop into excess.

32. The Rajputs drink pannia and make presents of ganja on occasions of festival and marriage. Neither the Musalman nor the Hindu religion requires the use of these drugs on religious occasions. On the other hand, it is prohibited. Nevertheless, as a matter of fact, in the mutts of bairagis, such as at Tripati and at the shrines of Muhammadan saints, such as at Nagore, Conjeveram, Arcot and other places, the *janisheen* or the manager of the shrine distributes ganja to all the fakirs who assemble during the *ooros* or festival. In none of these places, religiously speaking, ganja should be distributed; but, according to custom among the fakirs, its distribution is essential. On occasions like these, some consume these drugs excessively, while others are temperate. These habits are certainly injurious.

33. Public opinion is always against its consumption, as it demoralises the consumer. Nowhere the hemp plant is worshipped in this division.

34. Ganja smoking is not like opium eating. Ganja consumers can forego its consumption without much difficulty.

35. Absolute and sudden prohibition is not feasible. The drug will be consumed illegally. Prohibition can be enforced by enhancing the price of these drugs and checking the progress of hemp cultivation. Absolute prohibition would cause serious discontent among the consumers. Such discontent can never cause a political danger. Prohibition will be followed to some extent by recourse to alcoholic intoxicants and other drugs.

36. No.

37. Charas smoking is stronger than ganja smoking.

38. Flat ganja is more intoxicating than round ganja or chur.

39. Smoking ganja is more injurious than eating or drinking bhang; the former affects the lungs and brings on cough, which keeps them always sick.

40. Native doctors use ganja for some diseases. Ganja is used in cattle treatment also.

41. (a) No.

(b) No.

(c) Yes.

(d) Yes.

42. Is harmful. The consumer becomes emaciated.

43. Yes.

44. Causes immediate intoxication and keeps the body warm. Is refreshing to some extent. Allays hunger. The effect lasts for an hour or two.

45. (a) Yes; physical, mental, and moral.

(b) Yes.

(c) No.

(d) Causes dysentery and asthma.

(e) Causes laziness and debauchery in the beginning.

(f) Causes insanity, deadens intellect. The insanity is in some cases temporary and other cases permanent.

46. Habitual consumers are subject to fatal diseases to which they succumb.

47. No; the children of the moderate consumer are not effected.

48. The use of the drug is not hereditary; but the children of excessive consumers are weak and unhealthy.

49. No. No.

51. No.

52. No.

54. No.

55. Yes; ganja is mixed in cakes and other eatables, by eating which the victims become completely stupefied, when the criminals seize the opportunity to supply themselves. Complete stupefaction is induced by ganja without admixture.

58. The system is not working well. It gives room for illicit sale. Some check should be placed on the cultivation of hemp. Its cultivation without license should be made penal.

60. There is no restriction as to the cultivation of hemp plant.

61. Charas is not prepared in this division.

62. *Vide* answer to question No. 59.

63. No distinction is made between wholesale and retail dealers. The licensed vendor can sell any quantity for any price whatever.

64. No.

66. Difference in taxation is not necessary.

68. No.

69. No; if the sale of the ganja is sanctioned, there can be no use in considering public opinion about it.

70. No; the right of selling ganja is leased out annually.

Oral evidence.

Question 1.—I have put in thirteen or fourteen years' service as Sub-Registrar, Clerk in various Collectors' Offices, Tahsildar, Sub-Magistrate, and Deputy Collector.

Question 45.—The moderate use of the drugs does not cause insanity; it is only the excessive use does so.

Question 46.—I know many excessive consumers. Only a fortnight ago, the police brought before me an insane who had been taking ganja. He was sent to the Civil Medical Officer for observation,

and he will shortly be sent to the lunatic asylum. A barber, who used to come to my house in Madras, became insane from ganja smoking, and his brother told me a few days ago that he was still insane. He was barber in my family for three or four years. He is being looked after by his relatives. I don't know when he became insane, but I learnt in September 1892, when I visited Madras, that he had become insane. I only come to Madras during holidays and on special occasions. I was told by his own brother and several other persons that his insanity was due to ganja. I never saw him take ganja or smoke it.

I enquired into the first case here mentioned in my capacity as Magistrate, and ascertained that he was a ganja smoker. I did not myself examine witnesses. The enquiry was made through the police and the Subordinate Magistrate of Chittor, where I am stationed. The police produced the man, and I ordered enquiry to be made. I gave orders to the police who reported directly to me. I think I issued order to the Subordinate Magistrate to enquire for the man's relations. I don't recollect whether the Subordinate Magistrate touched upon any other point in the case, but I recollect that the police reported that the cause of insanity was ganja. The station officer of the place where the man lives wrote the report. The station officer is the head constable in charge of a division. The report said the man was a great ganja smoker, that his insanity was due to it, that he was dangerous, and his relations declined to take charge of him. The report covered, I think, one page of a printed form. The report contained no account of the way in which the enquiry had been conducted, no separate statement

of the witnesses, a mere statement that such and such information was given by the relatives, and the result arrived at. I learnt from the report that the head constable had personally made local enquiry from relations and others at the place where the insane lived. What I received was a summary of the result of that enquiry. I wrote a letter to the District Surgeon which mentioned the facts gathered in the enquiry, and requested that the insane should be kept under observation, but I did not forward the police report. This is the usual procedure. When a case goes to the asylum, the Medical Officer has to prepare forms A and C.

Ganja-smokers and eaters become generally enfeebled and emaciated, and get cough, and die of asthma and general decay.

Question 47.—When I first made enquiry about the hemp drugs, people told me that the children of ganja smokers were weak and unhealthy, but recently others have given me information to the contrary effect. Personally, I have no knowledge on the subject.

Question 58.—I think cultivation could be restricted without difficulty. A prohibitive order would have the effect of stopping cultivation in back-yards, without any great interference with the people, for there is not much of such cultivation, and ganja can be had cheap in the bazar. There would be no dissatisfaction among the people worth speaking of. I speak of North Arcot. Salem and Chingleput, at which last place my family are managers of a shrine, where once a year all the fakirs of the presidency assemble, and have ganja among other things distributed to them.

38. Evidence of B. NARAYANAMURTY, Brahmin, Deputy Collector, Ganjam.

1. Having worked as Deputy Tahsildar of several taluks, including Agency tracts, and Tahsildar in the Vizagapatam district, and as General Charge Deputy Collector of Chatrapur and Gumsur of the Ganjam district, I have had opportunities of observing the growth of hemp plant, and obtaining information regarding the uses, effects, etc., of hemp drugs.

2. The names *siddhi* and *subji* are not in use here, the terms applied to the dry leaves of the female hemp plant being *bhang* or *patti*. A liquid preparation of these leaves is also termed *bhang*. The word *charas* is unknown here. The dried flowering tops of cultivated female hemp plant are commonly called *kalis*. The three varieties of ganja are (1) flat *kali*, (2) round *kali*, and (3) *gunda kali*, equivalent to *chur*; but the second of these is rather scarce in these parts.

3. As far as I know, hemp plant does not grow spontaneously in the Vizagapatam and Ganjam districts.

4. It is known by the name of ganja in the above two districts.

5. Wild hemp plant is not known here.

6. Not known.

7. Hemp plant is cultivated to a small extent in back-yards of houses for the production of ganja and for the use of *bhang*, the trees being few and scattered.

8. The cultivation of hemp plant is rather on the increase, but not to any considerable extent. The increase is due to the rising of the price of ganja, consequent on the exclusive right of its sale being leased out under the rules in force.

9. Ganja seeds are first sown in a small bed about June, and when the seedlings grow about eight inches high, they are transplanted three or four cubits apart from one another. As the plant grows, the tops of the tender branches are severed, so that it may put forth many branches and produce many *kalis*. The ground about the roots is loosened, and goat's dung is applied as the best manure. They do not require much watering. When the tree is about to put forth *kalis*, they cut open the stem to the length of one inch or so at a height of about four inches from the ground, and introduce a piece of broken potsherd into the opening thus made. The heads of serpents are occasionally buried at the root by some whenever possible, while others fond of intoxication introduce into the stem pieces of opium instead of pieces of broken potsherd. As the growth of the tree progresses, and before *kalis* make their appearance, the branches are carefully twisted three or four times. This process tends to increase the number of twigs and with them *kalis*. Male plants are removed and destroyed. Female plants yield *kalis* to which small leaves are adhered. The trees are allowed to grow until the seeds in the *kali* become black and leaves red brown, and then they are cut about February or the beginning of March. The twigs with *kalis* are separated and exposed to the sun and dew for a day or two, and then placed under a good weight by which the *kalis* are flattened. They are again exposed to the sun and dew, and this process is continued until the ganja is fit for use. These *kalis* are separated from the twigs as necessity arises. Until then they are bundled up in straw.

10. The cultivation is not confined to any

particular class of persons. All classes accustomed to it will cultivate this plant.

11. No.

12. No wild hemp plant could be found here. Male hemp plants are, as a rule, removed from the female plants and destroyed.

13. No restriction is placed on cultivation of the hemp plant in the two districts already mentioned, and the cultivation is common in these two districts. It grows both along the sea coast and in the interior; in the plains and in the hill tracts as well. Red earth is said to be more favourable to its growth and effects than any other soil, and so in cold climate. The ganja produced in elevated tracts, such as Malayas, is considered superior to that cultivated in the plains.

14. (a) Ganja and bhang are to a small extent prepared in some *chuba* stations and *mutts* where ascetics and bairagis assemble, and in some such places.

(b) Charas is unknown.

(c) Bhang is a preparation made of dried tender leaves of female hemp plants, sugar, spices, and milk. Sometimes water is substituted for milk, when pepper also is mixed.

15. Wild hemp plant is unknown in these parts. Ganja and bhang leaves are gathered from the cultivated hemp plant. The former is used for smoking and the latter for drinking. The broken ganja locally called gunda or ganja is made into majum balls with sugar and spices.

(a) Ganja is smoked in a chilhem.

(b) Majum balls are eaten. In addition to this Madanakameswaram and similar intoxicating lehamas are prepared from ganja for eating.

(c) Bhang is prepared for drinking.

16. Bhang is generally prepared by the people in the houses for their own consumption. It is prepared from the leaves of the cultivated hemp plant. No wild plant is grown here.

17. These preparations were used to be made formerly by any class of people who wanted them for private use or sale; but they are now made by the ganja licenisees alone for sale.

18. Ganja will keep for two years, but begins to lose its effect after one year. Bhang leaves will keep for one year only. Deterioration takes place by mildew, and in order to prevent it, proper care should be taken to expose it to the sun as often as necessary.

19. Ganja is used for smoking and eating in the shape of majum and other lehamas of which it forms an ingredient.

20. Much of the Utiya population and some Telugas and Khonds (hill people) and almost all the fakirs and every bairagi and ascetic smoke ganja.

21. Flat and round ganja is equally preferred to kali, gunda, or broken ganja. Chur is not known here.

22. Charas is not known here.

23. Bhang is not used for smoking.

24. Bhang is used as drink by a very small and insignificant proportion of people who are fond of getting intoxicated, but who are averse to or prohibited from, by caste or position, the use of alcohol; but its use is not restricted to any particular locality.

25. The use of ganja appears to be on the

increase owing to the restrictions placed on the manufacture and consumption of illicit liquor.

26.	Ganja.	Bhang.	Majum.
(a)	50 per cent.	80 per cent.	60 per cent.
(b)	30 "	3 "	20 "
(c)	15 "	15 "	15 "
(d)	5 "	2 "	5 "

of the consuming population.

The above proportion is not accurate but approximate. The proportion of the consuming population may be 1 per cent. on the whole to the entire population.

27. Those that resort to ganja smoking are mainly taken from the lower castes having no social position; but instances are not wanting where high caste men of dissipated habits indulge in this smoking. Majum and bhang are used by all classes given up to luxurious and vicious habits. The society in which men constantly move, and lazy and sensual habits lead to the practice.

28. (a) *Smoking*.—1 to 3 tolas per diem, cost 1 to 2 annas per tola.

Eating.—The extract or the drug itself of half a tola of ganja per diem, cost half an anna to two annas per tola, according to the ingredients with which it is prepared.

Drinking.—Half a tola of bhang.

(b) *Smoking*.—Three tolas and upwards up to 12 tolas, cost two annas per tola.

Eating.—Upwards of half a tola up to two tolas.

Drinking.—Ditto ditto.

29. (a) 1. *Drinking* (Bhang).—Pepper and aniseed.

2. *Eating* Majum.—Dry ginger, cloves, cinnamon and jaggery. Madanakameswaram (used by the higher classes to increase virile power) the above things except jaggery, and several other spices, sugar, ghee, honey, besides medicinal roots.

3. *Smoking*.—Pure ganja is smoked, but is often mixed with tobacco before it is smoked.

(b) 1. *Drinking* Bhang.—Besides the drugs shown in (a) (1), nutmeg, cardamoms, dry ginger, milk and sugar are added with a view to give the preparation more intoxicating power.

2. *Eating*.—Datura seed is mixed to give the majum more intoxicating power.

3. *Smoking*.—Ganja is mixed with tobacco and smoked.

Bhang massala is not known here.

30. In the majority of cases, ganja is smoked in company and majum and bhang in solitude. The use of these drugs is mainly confined to males after twenty years, and the habit grows with age. Majum pills in mild form are medically administered to children, but not otherwise.

31. The habit of consuming ganja and bhang is easily formed. It is very difficult to break off. The moderate habit will in several cases tend to the excessive use of the drug in time.

32. There is no custom (religious or social) which requires the consumption of this drug.

33. The consumption of this drug is generally regarded as disgraceful in a social point of view, and intoxication is reckoned as a vice. The smoking of ganja is, however, religiously respected by ascetics, etc., as a means of absorbing the mind in meditation and practising *yoga*. Ganja leaves are, therefore, styled by this class *gyanapatti*—meaning

leaves of spiritual knowledge. Hemp plant is not an object of worship.

34. It would be a serious privation to forego the use of ganja smoking to fakirs, ascetics, and other habitual excessive consumers who have become complete slaves to the habit. For when they cease to smoke ganja, they become awfully restless, and suffer from pulling sensation in the body, life itself becoming a burden.

35. It is not feasible to prohibit the use of this drug. If prohibited, an illicit use will be made of it. The prohibition can be enforced by a special enactment; but such a course is most inadvisable, as a serious discontent will be felt upon it by consumers and cultivators of this plant. Such discontent may lead to political danger, as it will be very seriously felt by the numberless bairagis and other religious ascetics when they are deprived of their only luxury in this world. They may probably grow desperate, and may even be backed up by many bad characters given up to the same habit.

(a) No.

(b) Yes; to muddat, a drug more pernicious than ganja.

36. No. Alcohol is not being substituted for this drug.

37. Not known here.

38. Flat or round ganja, which contains less seeds, is said to give more intoxication than broken ganja.

39. Smoking ganja is less injurious than eating and drinking, because smoking does not produce the same amount of intoxication as eating and drinking.

40. Native doctors prescribe this drug in some cases to improve digestion; but it will be discontinued soon after the desired effect is produced. It is generally prescribed with other ingredients. It is first well purified and then mixed up with medicines, and prescribed for diarrhoea and other bowel complaints. It is not known whether this drug is ever used for cattle disease.

41. Moderate occasional use of ganja and bhang in a well purified, mild form in eating and drinking is beneficial in its effects.

(a) Yes.

(b) Yes.

(c) Yes.

(d) Yes, as a medicine.

No particular class of people use this drug. It is the moderate occasional use of the drug I refer to.

42. I do not consider even moderate use of these drugs to be harmless if the use is habitual, for the habit itself is not an approved one, and may bring on excess or impair the constitution in the long run.

43. Yes.

44. The moderate use of this drug on the habitual consumer in eating and drinking is refreshing. It does not produce intoxication, nor does it allay hunger. It creates appetite. The effect will last for three hours. The after-effects are exhaustion, giddiness, nauseous taste in the stomach and throat. It also produces uneasiness and longing.

45. The habitual moderate use of this drug in eating and drinking produces noxious effects physically to a certain extent, and morally to a very limited extent. Smoking does harm to mental powers also to a certain extent. Habitual moder-

ate use of this drug is apt to impair constitution and injures digestion ultimately. It does not cause dysentery, but will in some cases cause bronchitis or asthma. It does to some extent impair the moral sense and induces laziness or habits of immorality or debauchery. It deadens intellect, but does not produce insanity.

46. Excessive habitual use of this drug is injurious to mental, moral and physical powers. It impairs constitution, injures digestion. Smoking brings on diseases. Eating and drinking impairs moral sense and induces laziness or habits of immorality or debauchery and impairs the intellect. Eating and drinking produce temporary insanity in some cases, the symptoms of which may be induced by the use of the drug after liberation from restraint. The typical symptoms are cowardice and whirling sensation in the head, which will create a desire to be whirling round and round. The insane will confess to the use of the drug. In my opinion the use of the drug by persons suffering from mental anxiety or brain disease explains a connection between insanity and the use of hemp drug. There is evidence to show that insanity may often create a strong desire to the excessive use of the drug. A Brahmin of 30 years to my knowledge was indulging in eating majum to an excess. He became insane, and never walked straight without turning himself round and round like a wheel as he went from street to street, and felt that he was going round and round even when stopped; but his inclination for majum ball unfortunately became stronger during his insanity. There was also another case in which a man suffering from mental anxiety became insane by an excessive use of the drug.

47. No.

48. No.

49. The moderate use of the drug in eating and drinking will be practised as an aphrodisiac. It is rarely used by prostitutes. It is more injurious in this respect rather than its use as an ordinary narcotic, because it will gradually impair virile powers by debauchery and ultimately tends to produce impotence.

50. Excessive use of this drug will more speedily produce worse effects.

51. A large proportion of bad characters are not habitual moderate consumers of these drugs. Some of the bad characters who are habitual moderate consumers are by want occasionally driven to commit thefts of petty articles within their reach in order to gratify their desire. This seems to be the only way in which the habitual and moderate use has any connection with crime of the said character.

52. With regard to the excessive use of any of these drugs it may be said that excessive use blunts the sense of honour or fear of society, and renders man physically less useful for any steady hard work. They are inclined to be idle and generally take to gambling. These people are, however, to be found in large towns and *cusbas*, where they go on pilfering, as opportunities occur, on a much larger scale than the habitual moderate consumers of any of these drugs; but they seldom resort to grave crimes.

53. No.

54. No; I have neither known nor heard of such instances.

55. No; complete stupefaction can, as a rule, be induced by this drug without any admixture.

56. (a) The effects of hemp used in moderation and modified by the admixture of other substances, such as spices and native medicines, are harmless.

(b) If taken in excess is injurious in proportion to the quality and quantity of other substances with which it is mixed.

Dhatura is unknown here.

57. Already answered.

58. Excise system extends at present only to the sale of this drug. It is working pretty well.

59. The hemp plant is home cultivated, and any restriction on the cultivation and possession of the drug for domestic use may prove a hardship. All that is required is the exercise of vigilance, combined with prudence, on the part of Abkari officers to prevent illicit sales, which, I think, are to some extent carried on, and to place some restrictions on the cultivation of this plant for sale. I am aware that difficulties crop up in carrying out the restrictions proposed; but to restrict at once the cultivation itself may be felt severely by the people concerned.

60. The plant is not cultivated here in fields. A few scattered trees will be found in the back-yards of some houses. No restrictions are yet placed on cultivation.

61. Nil.

62. *Vide* reply to question 60.

63. None.

64. I have no objection.

65. Taxation on ganja and bhang is not advisable, for the consumers are mostly fakirs, ascetics, beggars, and others of the cooly class.

66. Different trades are not necessary here if taxation is not at all introduced.

67. Since the exclusive right of selling ganja is leased out the price of ganja is raised to two annas a tola, whereby the consumers are put to some difficulty.

68. There are no such houses or licensed shops in this district where the drug or its preparations may be consumed in the premises. I am not in favour of opening such houses, as they may have the demoralising and stimulating influence upon beginners who may be led away to these places.

69. The wishes of the people are consulted before a shop is opened through the police and Abkari officers.

70. Hemp drugs are imported into the district from the Agency tracts as well as from the Tributary Mahals of the Cuttack district.

39. Evidence of K. NARAYANA IYER, Brahmin, Deputy Collector, Gooty.

1. My opportunities were next to nil, except local enquiries made at a few places in this division.

2. I cannot say with certainty whether the definitions may be accepted or not. The people who use the plant in these parts can hardly distinguish the male from the female plants. The leaf of the hemp plant is generally known as ganja, and the powder of the leaf bhang. Charas does not seem to be made in these parts.

3. I do not know.

4. The plant is known by the name of ganja.

5. The plant requires occasional watering. No special climate or condition appears to be necessary for it.

6. I do not know.

7. The plant is cultivated to a very limited extent, its cultivation being confined to back-yards or vegetable gardens. It is used for (a), (c) and (d).

8. No increase.

9. The hemp plant is cultivated just like ragi. The seeds are first sown, and then covered with a layer of earth and watered. After a week or so the seeds begin to sprout, and they are subsequently transplanted. The plant requires watering now and then till the leaves ripen, after which the watering is generally stopped.

10. It is generally fakirs and ascetics who cultivate the plant. Agricultural cultivators also cultivate it; but to a very small extent in vegetable gardens for medicinal purposes or for fibre.

11. Not known.

12. I do not know.

13. It is not restricted. No special conditions seem to be required.

14. (a) and (c) are prepared to a very limited extent in large towns, but secretly, (b) is not prepared here.

15. The cultivation being very limited, no special methods of cultivation are observed. Ganja is

generally used for smoking. Bhang is consumed along with jaggery and spices or in the form of a syrup known here by the name of Ramarasam.

16. It is prepared by bazar men and sold. Bhang and ganja can both be prepared from the hemp plant wherever grown.

17. It is not restricted to any class.

18. Yes. These deteriorate if kept for over a year or a year-and-a-half. The strength of the drugs is lessened by the length of time.

19. Ganja is used for smoking or with legiams (jellies). Charas is not to be had in these parts.

20. Ascetics, fakirs and people addicted to drinking use ganja. The percentage of the population who use the drug is not accurately known.

21. The ganja generally used in these parts is called mulki, which is neither flat nor round. The flowering tops are not pressed so as to assume any shape; they are allowed to dry and then used as they are.

22. Charas is not at all known to many.

23. Bhang is not used for smoking, *vide* answer to question 15, chapter III.

24. Generally Rajputs and Marwaris living in these parts use bhang.

25. The smoking of ganja may be said to be on the increase, though it is sold at a higher rate than before.

26. The consumers are generally habitual moderate consumers.

27. *Vide* answer to question 20. Wandering fakirs and hard-working cooly classes take it to alleviate the fatigue they feel. Idleness also begets the practice.

28. (a) Generally a tola, worth four pies.

29. Tobacco is mixed with ganja for smoking purposes to lessen the bilious character of pure ganja. Dried ginger and jaggery are also used with bhang for taste. Dhatura is also said to be rarely and clandestinely used to increase intoxication.

Bhang massala is quite unknown in these parts.

30. These drugs are generally consumed in company. Children and women are generally not known to consume them.

31. The habit is easily formed ; but it is difficult to break off the practice.

32. No customs that I know of.

33. The use of ganja is generally held in disrepute by the higher castes ; but there is no public opinion, social or religious, among the class of people who use the drug. There is no custom of worshipping the hemp plant.

34. It will be a privation to the consumers if they are made to forego the consumption, as it is the cheapest way of indulging themselves in intoxication and forgetting their cares and anxieties.

35. It is quite possible to prohibit the use of the drugs ; but it will require a large preventive party. There will no doubt be discontent ; but I cannot say whether it would amount to a political danger. The consumers will surely have recourse to alcoholic stimulants.

36. No.

37. Charas is not used here.

38. I do not know.

39. Smoking is said to be less injurious than eating or drinking the same.

40. Bhang and ganja are taken with halwa or lagiem as stimulants. They are also occasionally given as medicine to cattle.

41. (a) Yes.

(b) Yes.

(c) Yes.

(d) Not known.

Musalman and other classes of people. The moderate occasional use of the drug will bring about the above results.

43. Yes.

44. The immediate effect is that the consumer feels intoxicated and is in a sort of dream. Occasional moderate use creates appetite. Its effects last for about three or four hours. After a meal

the effect of the drug generally ceases. Want of subsequent gratification produces a longing for it, and makes him uneasy.

45. (a) None.

(b) It does, if proper nourishment is not taken.

(c) No.

(d) No.

(e) No.

Moderate consumption does not produce any of the above results. And it is only when taken in excess that it is likely to produce evil results.

46. In very rare instances the habitual excessive use of bhang and ganja are known occasionally to have made people temporarily insane.

47. No.

49. No. No. No.

51. I do not know. I am not aware of any connection between it and crime of any special character.

53. I do not know.

54. No. It is said that men using the drugs get timid rather than bold.

55. I do not know.

57. I do not know.

60. The cultivation is very limited. No control seems to be necessary.

61. Charas not produced here.

62. No.

63 to 65. None.

66. No such distinction appears to be desirable.

67. No.

68. There are three shops in the division. The preparations are not consumed there, but only sold.

69. Wishes of the people are consulted before a shop is opened. The site is approved of by the Police and Magistracy before it is sanctioned. I think public opinion ought to be consulted in the matter.

40. Evidence of MR. J. H. GWYNNE, Deputy Collector, Wynaad, Malabar District.

1. My answers are framed on the result of local enquiries.

2. The dry leaves, when prepared for smoking purposes, are called bhang. The definition for ganja may be accepted for this taluk.

3. The hemp plant is said to grow spontaneously in the hills and forests in the south-eastern parts of the Wynaad taluk.

4. It is everywhere known as the ganja plant.

5. Hilly tracts are best suited to the growth of the wild hemp.

6. The growth is scattered.

7. The hemp plant is cultivated in parts of South Wynaad, especially in Sultan's Battery and its neighbourhood, for the production of ganja only. Roughly speaking, not more than 12 acres altogether are under this cultivation. Usually a few plants, varying from two or three to a dozen at most, may be found in the compounds attached to dwelling houses.

8. There has been no appreciable increase or decrease in the area under cultivation recently.

9. Beds are prepared in nurseries, the earth is properly turned up and made loose. A quantity of manure composed of dry powdered cow dung and ashes is then mixed up with the earth. The seeds are then scattered over the beds, and a thin layer of earth laid over. A month or six weeks after germination, the seedlings are fit to be transplanted.

10. Cultivators of the hemp plant do not belong to any special class. They are of the same classes as other agricultural cultivators.

11. No ; at least not in this taluk.

13. The cultivation is not restricted ; but agriculturists here, as a rule, do not give their attention to it. A cold climate and black gummy soil are very favourable. Heavy dew is more suited than rain. The elevation above sea level need not be great.

14. Ganja and bhang are prepared here. Both are

used for smoking purposes. Their use is, however, not general. Probably 40 per cent. of the population use them.

15. There is no difference in the method of preparation from the cultivated and wild plant. The plants are cut and dried as they are by exposure to the sun. When they are well dried, the branches with their leaves and flowering tops are piled up in bundles and pressed.

For smoking, take a small quantity of the flowering tops and leaves, place it in the middle of the palm, add a quantity of water, and rub it well over with the thumb; when it is reduced to a pulpy state squeeze out the water. This process should at least be repeated three times. Then add a quantity of tobacco in the proportion of one to two of bhang, mix it well and then use in a pipe.

16. Bhang is generally prepared in their houses by the consumers themselves. It can be prepared from the hemp plant wherever grown. Ganja can be prepared from wild plants.

17. Usually by those who cultivated it, *viz.*, Chetties, Urali Kurumars, Mulla Kurumars, Pathians, Katunaikars, Tenkurumars, etc.

18. The leaves of the female plant are said to possess greater narcotic property in them. Bhang will keep good for about a year, provided it is kept air tight. After that it gradually loses its power. Ganja will keep good for a few years, provided it is periodically exposed to the sun and kept secure from damp.

19. In this taluk both bhang and ganja are used for smoking. Latter is also used for eating.

20. Ascetics of all castes smoke ganja and bhang, also Chetties, Paniers, Kurumars, and a few Muhammadans. Their use is more extensive in the villages surrounding Sultan's Battery, and also in Muppeinad and Kottapadiamshoms. About 40 per cent. of the population use them.

21. The round and chur varieties are preferred.

23. Yes; in the villages where the hemp plant is grown. The cultivating classes smoke it. 40 per cent. of the population use it.

25. The use of ganja and bhang may be said to be on the increase. In former days, only those advanced in age indulged in these drugs, but now the case is different. Bhang is cheaper than other intoxicants; its consumption is developing.

26. (a) About 50 per cent. fall under the head.

(b) About 20 per cent. fall under the head.

(c) „ 25 ditto ditto ditto.

(d) „ 5 ditto ditto ditto.

27. From the cultivating classes and hill tribes. The circumstances which mainly lead to the practice are idleness, mendicancy, and an inclination for intoxicants.

29. Usually tobacco is used with bhang by ordinary smokers; but confirmed smokers add the smashed seed of nux vomica to make it stronger.

30. Bhang is generally used in company by occasional moderate smokers. Regular smokers will smoke in solitude when left to themselves. Habitual excessive smokers prefer solitude to company for the purpose. Its use is confined to the

male sex. In rare cases children learn the habit from their fathers or guardians, who get the preparation made by them.

31. The habit of consuming is easily formed and difficult to break off. The tendency is always to develop into taking more and more.

32. No religious or social customs make the consumption of the drug essentially necessary. Ascetics use it on the plea that it helps to concentrate the mind, and thus enables them to fix their thoughts wholly upon God.

33. Owing to their known intoxicating properties and demoralising effects they are generally regarded in disrepute. The hemp plant is not worshipped by any class of people.

34. Habitual consumers would regard it as a serious privation to forego the consumption of the drug they use, for in its absence they are apt to become restless, with no inclination for work, combined with a gradual loss of appetite.

35. If the use of the drugs is to be prohibited, the cultivation of the hemp plant must be made penal. Then the wild plant will be resorted to, and illicit consumption would largely prevail. Of course, the prohibition would cause serious discontent among the habitual consumers; but nothing approaching a political danger. The prohibition is likely to be followed by recourse to alcoholic stimulants and opium.

36. Alcohol is not substituted for ganja or bhang, as it is more expensive.

51. A large proportion of bad characters are not habitual moderate consumers of these drugs. The moderate use of these drugs has not been known to have any connection with crime in general or with crime of any special character.

52. The excessive use of any of these drugs tends to render the consumer dull and stupid and incapable of bringing his mind to bear upon the subject of committing any crime.

53. No; no case is known to have occurred in which the excessive indulgence in any of these drugs has led to temporary homicidal frenzy.

54. No such instance has come to light; but it is quite possible that criminals may use the drugs just before they set out on an errand of violence or crime in order to fortify themselves in the performance of their dastardly deed.

55. No instances have come to notice. None of these drugs can by itself cause complete stupefaction; but if they are mixed with dhatura, it is said that complete stupefaction will ensue after the same has been partaken.

60. There is no control whatever over the cultivation of the ganja-bearing plant or in the process of the preparation of ganja.

62. I do not think that it will be feasible to control the cultivation of the plant, more especially as it is not grown here to any large extent. It is found scattered here and there, a few plants being the most that can be found in any one house compound.

63. There is no system of wholesale or retail vend of these drugs or their preparations in this taluk.

64. No such regulations exist here.

41. *Evidence of M. R. RY. P. VEERASWAMI NAIDU, Deputy Collector, Masulipatam.*

1. From enquiries made.

3. I have no knowledge of its spontaneous growth anywhere.

4. Ganja is also known as gnanapatrika, varakulkyal and bhangy aku. Yes.

7. (a) Yes.

(b) No.

(c) Yes.

(d) Yes; for fibre and seeds.

This is called janumu here. Janumu is a kind of hemp which is cultivated abundantly in this district. The seeds are sown broadcast in paddy-fields just 15 days before harvest. It is also cultivated in dry fields. Janumu flowers within two months, and will then be cut and used as fodder for cattle. Cattle like this fodder well; but their health is impaired if no other fodder, such as straw, is not used. Janumu seeds after three months and the seeds are useful for sowing; but its stalks are not fit for fodder. The stalks are dried for several days, and then tied into bundles, and steeped for a fortnight in water, where they are kept under pressure, then taken out and beaten with mallets; the fibre is thus stripped off from the stalks and then sold for the manufacture of bags, ropes, etc.

Ganja is grown extensively in Daggupad village, Bapatla taluk. It is said to grow also in the Kistna accretions near Challapally, Pidugullanka at a distance from Chitgudar, Pamarru, Bommalur near Gudivada, and in the compounds of certain people at Masulipatam. The cultivation of hemp (Janumu) is carried on in both wet and dry lands.

9. The fields will be ploughed up, and the seed sown broadcast. In compounds, people dig up earth and sow the seed. The seedlings spring up in a week, and will be thinned after 15 or 20 days. The plants grow well in black-cotton soil and yield good crop. The sowing season is generally early part of October, and transplantation takes place about the early part of November, while the following February is the time for harvest.

10. No; they are of the same class as other agricultural cultivators.

11. Wild hemp is not known in these parts. It is only by raising ganja plants, ganja is produced.

13. No restriction in this district. It is cultivated in all places and everywhere. If the soil is manured, it grows well and ensures a good crop. In black-cotton soil it grows luxuriantly, and is the best that can be had here.

14. (a) Yes.

(b) Charas is not in use here.

(c) Yes.

Ganja is extensively cultivated at Daggupad, Bapatla taluk. Bhang is made of ganja.

15. (a) Ganja plant is of two species, *viz.*, male and female. Male plant does not produce resin, nor does it seem to be fit for any purpose except for good fibre. It is from the female plant that ganja is extracted. In the female plant the flower and the fruit mix together and assume the form of an ear. The ear ripens just like that of millet and will be cut and the seeds separated. The remaining substance will be kept in the snow for two days and then dried up and filled in bags. It will be sold to the purchaser at the rate of 3 pies a weight of the 3 pice

coin. The purchaser takes the substance, separate the seed, if any still remaining, washes it well in his palm, dries it by pressing the same with his cloth and keeps it separately. Then he mixes it with thick tobacco powder in proportion of 3 to 1 in weight, and smokes the mixture and gets intoxicated. Some people get intoxicated by eating the ganja substance without any admixture; some by taking it in the form of powder mixed with pepper; some ground the mixture well, put it in a piece of paper, and roll the paper into the form of a cigar, and then smoke it to get intoxication.

Bhang is prepared from the leaves. The leaves are repeatedly washed to remove the green colouring matter. They are then pounded well, and then mixed with the juice prepared of cocoanut pulp, black pepper, dried ginger, and poppy-seed. Then either sugar or jaggery is mixed with this, and the mixture thus formed is drunk. Some people drink the mixture, adding to it some sweet plantains or milk according to their taste. One-eighth of a seer of this draught is enough to intoxicate a person. Its effect is to cool the system, and varies according to the constitution and temperament of the consumer. The use of bhang is better than that of ganja. Bhang makes the consumer more active and lively in his work.

Charas is prepared from the resin which exudes from the leaves of the plant. The resin will be a little heated, and then well grounded in the palm with some tobacco till a mixture is formed. This mixture is then put into a pipe and smoked, and the man gets intoxicated. But it is not in use here.

Majum is another kind of preparation from the resin. But this resin is not that which exudes from the leaves, but is what is obtained by boiling the ganja leaves in water with ghee. The resin is cooked with sugar, and the powder prepared of cardamoms, nutmeg, etc., spices, into a paste and then eaten. The effect will be a little intoxication. It is a good remedy for dysentery.

16. Bhang is prepared generally by the people in their houses. I hear that some who practice bhang grow ganja plants in their compounds. Bhang can be prepared by ganja wherever grown.

17. Ganja chillum, *i.e.*, a pipe prepared by people who smoke ganja through it. Ganja bhang by those who drink it, and majum by the licensed vendor.

18. Ganja, charas or bhang deteriorates if it is not consumed within one hour, and loses its effects entirely after two hours, though it may retain its full effect for one hour after its preparation. If diluted in water it deteriorates quickly, and no measures are possible to preserve its effect long.

19. Ganja and charas are used only for smoking, while bhang is used as a drink in all places.

20. Chiefly used by byragis, sanyasis, and fakirs, and generally working classes. I hear that those who delight in intoxication smoke ganja as it serves their purpose at a comparatively very small cost, equally with liquor, arrack, and toddy. One pie worth ganja or $\frac{1}{4}$ anna worth bhang has the same intoxicating effect as 2 drams of arrack of 30° U. P., costing 2 annas 6 pie.

21. Flat ganja is prepared for smoking here, and in fact seems to be the only kind in use. I hear that round ganja also is used in Madras.

22. Charas is not used here, but is said to be used in Madras and Hyderabad.

23. Bhang is never used for smoking.

24. Bhang is drunk generally by all classes of people, except higher classes, and by monks and fakirs particularly. In almost all countries one-fortieth of the population drinks bhang as a beverage. Three pie worth bhang is sufficient to intoxicate 10 people if administered equally.

25. The use of ganja and bhang is on the decrease, as it has been experienced to be injurious to health by those who use them excessively.

26. (a) One-fortieth of population habitual moderate consumers.

(b) About 1 per cent. habitual excessive consumers.

(c) About 1 per every 200 occasional moderate consumers.

(d) About 1 per every 1,000 occasional excessive consumers.

27. Generally from all classes. People that suffer from spleen or dropsy use it as a remedy and get themselves accustomed to it. Fakirs, monks and ascetics consume it in order that their minds may be concentrated with more or less forgetfulness of worldly cares in offering their prayers to the Almighty.

28. (a) One pie worth ganja and $\frac{1}{2}$ pie worth bhang.

(b) $\frac{1}{2}$ anna worth ganja. $1\frac{1}{2}$ pie worth bhang.

29. Tobacco is mixed with ganja and resin. Rich people mix with it sweet plantains, milk and sugar and take the mixture as a cool refreshment. But the poor purify the ganja, then make powder of it, and make a mixture of the same with water and jaggery and drink the mixture. Dhatura is not mixed with ganja.

30. The consumption is practised in company. A few females also use bhang and ganja. Children do not generally use it.

31. Habit is easily formed. It is difficult to break it off. There is a tendency for the moderate habit to develop into the excessive.

32. No custom, either religious or social, obtains here.

33. The consumption of these drugs is not regarded as good, and the consumer a good man. He becomes excited and loses temper. As the consumption affects manhood, it is in disrepute. The worshipping of ganja does not obtain here.

34. Yes; the person accustomed to it cannot give it up, as without it he cannot generally digest his food. Medicine will not act properly on those who use the drug.

35. It is feasible to prohibit the use of ganja. The drug is consumed illicitly. The prohibition may be enforced by an act declaring that the cultivation of the drug is illegal and criminal. But this gives rise to discontent among consumers, although there is no apprehension of political danger. The prohibition would be followed by recourse to alcoholic stimulants and other drugs, such as the seeds of mushtikaya (*nux vomica*), which is used as follows: the seeds are separated from the fruit. Each seed is of the size of 1 pie, and is cut into two parts. Each part is sufficient to intoxicate a person accustomed to eat it raw. If eaten by those unaccustomed to it, they will be subject to the symptom of aconitic poisoning. Those who are well accustomed to it can eat one seed. Some peel off the skin of the seed and powder it with dried betel leaves and smoke the mixture to get intoxication.

36. No; alcohol is not substituted for drugs.

37. There is no charas here.

38. There is only one kind of flat ganja here.

39. No; smoking affects the breast; eating it raw will tend to madness. Bhang drinking is not bad. It is believed that those who practise ganja keep their health properly, *i.e.*, can bear the climate of any place they go to and digest their food properly, and that if they give up smoking indigestion comes on.

40. Native doctors prescribe majum for dysentery.

41. (a) Moderate use of ganja or bhang is beneficial as a food accessory or digestive.

(b) Yes.

(c) Yes.

(d) It is used as medicine for dropsy and spleen. Ordinary classes. Working people.

It is the moderate habitual use.

42. I consider the moderate use of any of these drugs to be somewhat harmful on the whole, the reason being that it gradually affects chest and manhood to some extent.

43. Yes.

44. Immediate effect is intoxication. It is refreshing. It produces intoxication. It creates appetite. Its effects last for 6 hours. The after-effect is a longing for it again. The want of subsequent gratification produces longing and uneasiness. If the person does not get the drug he will at last eat opium.

45. Yes; it impairs the constitution. Gradually destroys the digestive powers. It causes asthma. It does not impair the moral sense or induce laziness or habits of immorality or debauchery. It deadens the intellect or produces insanity if excessively used. The insanity is temporary. The symptoms may be re-induced by the use of the drug after liberation from restraint.

46. The effects of excessive use are:—(1) The person is always under the power of intoxication; (2) he does not like to work; (3) he is disposed to commit theft. His chest is affected. He loses manhood.

47. No.

48. No.

49 and 50. The use of the drug tends to produce impotence.

51. No.

52. Excessive consumers are generally bad characters.

53. The effect of excessive use is to make the person timid, and hence the excessive indulgence in it does not incite to unpremeditated crime or violence.

54. No.

55. Complete stupefaction can be induced by the drug without admixture.

57. Ganja, if eaten, creates biliousness and tends the person to insanity. Bhang, if drunk, cools the system.

59. If the cultivation of ganja is managed departmentally, as is the case in the manufacture of salt, the revenue from this source will steadily increase, and ganja of better sort will be produced.

60. No; the system requires modification. If the cultivation of ganja is left to the people they will be using it freely. As every one can with impunity raise the crop, people will be induced to

make use of it. As every one who wants it can get it easily, the revenue too will not be increased. If the crop is cultivated under the direct management of Government, cured and sold as in the case of salt, revenue will be increased and good ganja will be produced. Its use also may fall into disrepute gradually to some extent.

62. Bhang is not a separate crop here, but is made of ganja.

68. There are two ganja shops at Masulipatam. In one of them majum also is sold. But some purchasers will consume there.

69. Public opinion should be considered in opening a shop where consumers should smoke.

42. Evidence of TADEPALLI SIVARAMAYYA, Brahmin, Pensioned Deputy Collector, Chatrapur.

14. Ganja and bhang are prepared in this district, but not charas. They are prepared in all the *mutts*, and by those persons in whose backyards the plant is grown to a certain extent.

16. Bhang is prepared by the people in their own houses. Ganja and bhang can be prepared from the hemp plant wherever grown if the plant does not blossom.

19. Ganja is used for smoking and in the preparation of majum (the balls ordinarily sold in the bazars of all the towns by the licensed vendors). It is also used by the native doctors in the preparation of several medicines.

20. All the bairagis and fakirs, a portion of the lower classes including a small portion of the upper classes smoke ganja in almost all the localities. About 25 per cent. may be said to use it.

24. Bhang is used by people comparatively in easy circumstances in a less proportion, and it is not confined to any particular locality.

25. The use of ganja may be said to be on the increase, because a large number of the lower classes who were formerly using country liquor are said to have betaken themselves to ganja smoking in consequence of the higher prices which they are obliged to pay for the liquor.

28. It cannot be correctly stated, but it may be safely said that its cost is certainly less than that of the liquor.

32. On the 1st day of the month of "Mesham" (Aries) which generally falls on or about the 11th April, bhang and spices are ground and mixed in sugar water and offered to the idol of Hanuman in all the *mutts* and freely distributed to all the people then present, *i.e.*, to such as have no objection to drink it.

33. Those that do not use the drug hold the smokers of ganja and drinkers of bhang in contempt just like teetotallers do those that use the

liquor. There is no custom of worshipping the hemp plant.

39. Drinking bhang is better than smoking or eating ganja, because the several ingredients which are used in the preparations of the drink lessen the force of the bhang, and because the strength of the bhang itself is less than that of ganja.

40. The use of ganja is prescribed on account of its medicinal qualities in the preparation of several medicines by most of the schools of native doctors. Ganja is boiled in cow's milk, and the butter which is extracted from this milk is used in the preparation of these medicines. None of these drugs is used in the treatment of cattle diseases.

41. Moderate use of ganja and bhang is beneficial in their effects.

42. Moderate use of these drugs is quite harmless.

43. Moderate consumers are certainly inoffensive to their neighbours.

44. It is refreshing. It creates appetite and gives sound sleep. It produces slight intoxication which lasts a few hours. Its want at the usual hour will produce longing, just like that of liquor, cigar or snuff.

45. No.

49. Yes.

51. Most of the bad characters are habitual consumers of either ganja or of liquor. It has no connection with crime.

53. Excessive indulgence will render the consumer unfit for any active work, either good or bad, just like an inveterate drunkard.

55. They do in rare cases. Complete stupefaction cannot, however, be effected by the use of this drug alone without the admixture of certain other ingredients, such as opium and the seed of "Ummetha" (*dhatura fastriosa*).

43. Evidence of MR. W. E. GANAPATHY, Retired Deputy Collector, Palamcottah, Tinnevely.

1. When I was serving as Tahsildar under Government, I had frequent opportunities of observing and hearing of the cultivation of the ganja plant and its uses.

3. In the district of Tinnevely, of which I have most knowledge, no hemp or ganja plant grows spontaneously.

7. In the Tinnevely district, it is not very extensively cultivated. It is grown here and there amidst other garden or kitchen cultivation. It is cultivated for production of (a) ganja, (c) bhang, and (d) seed.

8. The cultivation of this plant has of late almost

entirely ceased, since the imposition of duty upon it.

9. There is not any particular method pursued in the cultivation of the plant. It is grown in the usual way that is adopted for raising ordinary garden cultivation. It is raised from seeds, but when it has attained a certain height, the top shoot is nipped in order to enable the plant to throw out additional branches and to become thick and bushy.

10. There is no special class of people who cultivate this plant. It is cultivated by garden cultivators in general.

13. It can be raised everywhere in the province

Its cultivation is not affected by climate, soil, rainfall, elevation, etc.

14. Charas is never made in this province, but the other two preparations (ganja and bhang) are made and those, too, to a very limited extent.

15. From the cultivated plant it is prepared for smoking thus :—Seeds and sticks are first removed. The leaves are then washed in cold water till all the colouring matter is removed from them ; they are then squeezed, keeping the same in the palm of the left hand, and pressing them with the thumb of the right hand. A quantity of tobacco is added to it before used for drinking ; the leaves are first washed in water, they are then mixed with poppy-seeds, nutmeg and other spices ; the mixture is first cleaned by water, milk, and cocoanut juice, and then ground with milk or water ; it is dissolved in milk or water and then drunk ; this preparation is called bhang or subji. The leaves are ground with other medicinal substances and made into a conserve, which is eaten as medicine. Those who desire intoxication, wash the leaves in water and eat them after mixing the same with jaggery ; the effect of this is instantaneous.

16. Those who are in the habit of using it, prepare bhang in their own houses.

17. All who use hemp drugs buy ganja from shops and make their own preparations, unless they have the produce of their own cultivation.

18. Bhang should be used directly it is prepared. If kept, its quality will deteriorate. Ganja may be preserved for a year ; if it is well dried and kept from being exposed to changes of weather, but the conserve will not keep beyond six months ; it will then become quite useless.

19. Charas is never used as already stated ; ganja is not only used for smoking, but it is also used for medicinal purposes. It is used everywhere as medicine.

20. Fakirs among Muhammadans and ascetics among Hindus including pilgrims from Northern India are in the habit of smoking ganja ; very few others are addicted to it.

21. Flat ganja and broken ganja are indifferently used.

23. Bhang is not used for smoking.

24. *Vide* answer 20. It is further to be added that all classes of people use the drug as medicine.

25. It is neither on the increase nor decrease ; it is consumed as usual.

28. The quantity taken by an individual depends upon the effects it produces upon him. His cost does not exceed 4 pies daily.

29. For smoking, tobacco is usually added. Dhatura seeds are added only for rendering it highly intoxicating when making Pooranathi conserve. For medicine, several sorts of non-intoxicating stuffs are mixed with this drug.

30. Smoking is usually practised in company. Usually males contract the habit ; children never

take to it. It is not confined to any particular time of life among adults.

31. The habit is not easily formed, but when it is once formed, it is difficult to break off. The habitual moderate use is liable to develop into excessive consumption.

33. Those who use the drugs are considered men of bad reputation ; it is not considered safe to have dealings with them.

34. Those who are habituated to it suffer in health, if deprived of it.

35. I think the use can be prohibited. Illicit consumption may gradually cease. I answer the other points in the negative.

36. No.

37. Charas not being used here, I cannot describe the difference.

38. Flat and broken ganja is used here.

40. Both the Muhammadan and Hindu systems of medicine prescribe the drugs. It is not known to be used for cattle diseases.

41. It is taken—

(a) for improving digestion ;

(b) for alleviating fatigue ;

(c) for preventing malarious diseases.

42. It is beneficial when used as medicine. Otherwise it is injurious.

43. They are inoffensive.

44. Moderate use is said to produce appetite ; but excessive eating, drinking, or smoking repels food.

45. Moderate use is said to produce all the good effects mentioned. It does not produce insanity.

46. Excessive use produces effects contrary to the benefits described in the previous answer.

47. The habit cannot be said to be of hereditary tendency.

49. Moderate use does not produce impotence.

50. Excessive use does produce impotence.

51. Moderate use of the drug does not lead to commission of criminal offences.

52. Excessive use may lead to criminal acts being perpetrated.

53. There is no such report that I know of.

55. Thieves have been reported to use this drug. Dhatura and other intoxicants are mixed with this for stupefying victims of their criminal acts.

56. When dhatura is added for increasing intoxication, the habit is said to gradually lead to permanent insanity.

58. The present system of excise administration seems to work well.

60. The cultivation of ganja is not, as already stated, extensive, and the agriculturists do not as a rule aspire to increase the cultivation, and so no information is available on the point referred to.

61. Charas is never prepared here.

44. *Evidence of C. VENKATA CHALAM, Tahsildar, Guntur.*

1. My experience as Tahsildar for several years. The opportunities I have had of obtaining information while putting the monopoly of the drug to auction and while inspecting the shops ; also the occasions on which persons accustomed to the use of the drug at a time at which they were under the influence of drug, when they appeared before me either as complainants, witnesses or defendants in

criminal cases, and in various enquiries as a revenue officer.

3. None.

14. Ganja is prepared in Kistna and Godavari to a small extent. In Kistna the places are—Masulipatam, Guntur, Nizampatam, Isandole, Bhattiprole, etc. In Godavari—Cocanada, Rajah-

mundry, Ellore, Narsapur, Peddupur, etc. Bhang is not consumed in these districts. Charas is not a word in use, and it is not known here.

16. Bhang is not used here. It is not known if it could be prepared from wild hemp. Charas is not known here. There is no wild growth of ganja here.

19. Ganja is used not only for smoking, but also in preparing intoxicating stuff, called majum, halua and some medicines. It is not known for what other purposes ganja is used.

20. Ganja. Muhammadans on a large scale. Sudras specially addicted to this habit to some extent. Religious devotees, such as bairagis and bavajees. The proportion is too small, say about 10 per cent. amongst Muhammadans, and about 1 to 2 per cent. amongst Hindus, excluding bairagis and bavajees, all of whom, without exception, smoke ganja. The localities are those mentioned against question No. 14.

24. None.

25. The use of ganja is slightly on the increase, as it could be seen from the quantity of ganja brought for sale into the licensed shops.

28. Three pie in case of ganja.

32. In social life, amongst lower orders, the smoking of ganja is not taken objection to and so religiously. In higher orders of society, there are hardly any cases of ganja smoking. Consumers of preparations made with ganja, such as majum, halua, etc., are looked down in higher orders of society. Religiously the consumption of ganja is taken objection to. Ganja goes by the name of gnanapatri. It means wisdom leaf. There is a notion amongst certain classes of religionists that ganja smoking helps steadiness of mind in devotion.

33. The consumption of the drug is considered as degrading. The public opinion against the consumption is socially demoralising and degrading. Religiously it is prohibited in this part of the country. The use of ganja is in disrepute, as it is considered to produce unwholesome effect on the mind of the consumer, in making him unsteady in his avocations, unfit to manage any business, unfit to be the managing head of a family, and unsuitable generally for the purposes of society. It is very often found to accelerate death in cases of extremes. Many instances are within my knowledge

in which parents of young men accustomed to the use of this ganja and its preparations have had serious thoughts about their sons' future. The plant is not worshipped in this part of the country. To show to what extent ganja smoking is despised, I take the liberty to quote the following folk-song sung in public dramas :—

There is nothing in the world to compare with ganja.

There is no godliness equal to lying.

39. Both are considered to be more or less injurious, because the smoker, though half conscious under its influence, is equally emaciated as the consumer.

40. Not by itself. It is not used in the treatment of cattle diseases.

41. No.

42. Even moderate use does harm, as it affects the mind and health of the consumer to a greater or less degree.

43. They are positively offensive.

44. It prevents the nervous weakness and mental disturbance of the consumer. It is not refreshing. It produces intoxication to a certain extent. It slightly allays hunger, to produce it again with double-fold effect immediately. It does not create appetite. The duration of its effect depends upon the dose. The effect is produced if the dose is increased over the usual quantity. There are often effects of mental debility and physical weakness.

Want of subsequent gratification will produce longing and uneasiness.

45. It is believed that even moderate use of this will produce noxious effects physically, mentally and morally. No case has been continually watched to give a narrative account of it.

49. Yes.

51. Bad characters generally use this in large quantities. It has no connection with crimes. It is an auxiliary to gamblers, such as cock-fighters, etc.

53. The excessive use of this drug does not incite unpremeditated crimes. It produces timidity and not excitement. I am not aware of any case of any homicidal frenzy.

54. No.

55. No.

45. Evidence of A. KRISHNAMACHARULU, Tahsildar, Bapatla, Kistna District.

1. As Tahsildar I have had the opportunity of consulting the actual cultivators and dealers of these drugs in this taluk; and further on several times had occasion to observe the consumers of these drugs.

2. Terms bhang and subji are used in this taluk and denote the dried leaves of the male plants, cultivated in this part. Female plants are destroyed and not at all used. Charas or the resinous juice is not separately collected and is not used here.

The term ganja is applied to the dried flowering tops of the male plants. These are called generally (kalle). They are coated with resinous matter. Seed is formed inside this kalle. The formation of the seed is not prevented. Only one variety, i.e., flat ganja is prepared here. And it is known by the simple name of ganja.

7. It is grown in the villages of Dagapad and

Pusapad, Bapatla Taluk, Kistna, District—

(1) For production of ganja.

(2) For use as bhang.

Fibre is not extracted from the plant here. The seeds are carefully preserved for sowing, and they are said to be also used occasionally for feeding milch cows, etc.

8. The sale of this drug has been licensed since July 1889. Before that, the cultivation was more extensive, but now it is brought down to about 125 acres. A statement of its cultivation for the last five years is attached.

9. Seed beds are first prepared, and seedlings grown and daily watered till they grow up to a span's height. The top leaves of the plants are then nipped off, and the plants are allowed to grow in the same place till they put forth new leaves. Thence they are transplanted in large fields prepared for the purpose. Generally four or five plants are put in together. The transplantation

is made in regular rows, with an interval of three spans between every two rows. A little quantity of water is poured at the root of every plant at the time of transplantation. The time for this is generally October. After transplantation the crop is not watered, but is left to itself. Rain is not much needed; one or two showers within the first month after transplantation will be quite sufficient, and the crop will thereafter grow with the cool and dewy winds of the cold season. The fields are ploughed twice over between the rows of trees just to turn up the soil and facilitate their growth. The fields become ripe for cutting in February. This time is determined by the growth of kalle and the seed in it, and the change of colour of the whole tree into yellow.

The trees are cut with the ordinary sickles before they get dry. This cultivation is analogous to that of chillies in these parts. The fields range in size between 1 and 6 acres; rubbish gatherings in the cattle stalls and sheep manure are very essential, and where these are not applied to the field before the transplantation, the growth of the crop is very poor.

10. There is no special class of cultivators of this plant. The riyats of the village generally grow this crop in the best portion of their holdings.

11. Wild seeds are not brought into these parts, nor are they ever used for growing the crop.

12. It is not known to the growers or dealers of this plant here if wild hemp is anywhere growing spontaneously or specially cultivated for the production of ganja.

13. There has been no restriction for the cultivation of this plant but that of usage or custom. It is not known to be grown anywhere in the Godavery District or Vizagapatam District, and even in the Nellore District its cultivation seems to be restricted to only one village of Kuditipalam in the Nellore Taluk. The special conditions as regards climate, rainfall, etc., are noticed in the answer to Question 9. The soil best suited is the black cotton soil, without any admixture of sandy or saline soil.

14. Only ganja is prepared by treading under feet the kalle or dried flower tops. What is called bhang in these parts is not any special preparation. Small leaves also grow up round the kalle. As the kalle is trodden down, these leaves do not fall off, but remain with kalle, which assumes the form of cakes by thus being trodden down. For purposes of bhang these leaves which fall off when the flat ganja (cakes above mentioned) is separated into small pieces, are collected together and used.

15. Ganja is used for smoking only and bhang for drinking only. The flat ganja is taken up, and small portions of it are used at a time. When a bit is taken off from a large cake, the dried leaves fall off, and the flower portion is then well rubbed in one palm with the thumb of the other hand and washed clean in water. This is then again rubbed with a small quantity of tobacco and then put into the chillum with fire for smoking. The leaves separated from the kalle in the above manner are used for drinking bhang. The leaves are boiled in water and then ground down into a paste. This is then put in a cloth and the juice pressed out between fingers. This juice is then mixed with milk and sugar and then drunk. Those who cannot afford milk mix the juice with water and sugar. As for eating,—the ganja kalle separated from the leaves is well fried in ghee and then removed, and the ghee which has then acquired the essence of the ganja is mixed with sugar, spices, wheat flour, and other substances, and made into round balls, which

are then eaten under the different names of majum and halva. No other process of eating is known in these parts.

16. Yes; it is generally prepared in houses. (No experience of wild plant in this country.)

17. Only majum and halva are said to be prepared and sold in town licensed ganja shops. The other preparations, ganja balls for smoking and bhang juice for drinking, are not sold in shops, but they have to be prepared by the consumers at the time required. There are no special classes of people for this business.

18. Majum or halva is said to last a month after its preparation, but it gradually loses its taste day by day. Ganja balls are not made at a time and kept for use afterwards, because ganja loses its effect when it dries up. Bhang also is not made except at the time of use because of its liquid nature and connection with water; it will not last longer than a day at the highest in a drinkable state.

Trade.—Though the sale of hemp drugs was licensed in 1889, no accounts seem to have been furnished till last year, 1892-93. The figures supplied by the renter for that year show that a quantity, 698 seers and 15 tolas, of ganja was sold by retail. No information was given about the quantity exported. This information, I regret, is very meagre and incomplete, but more particulars are not available.

19. Ganja is used only for smoking in these parts.

20. Smoking of ganja is practised to a very limited extent. It is generally prevalent among bairagis, and among the settled population it is used very secretly irrespective of class or caste. Agricultural people and merchant class and Brahmins, who abstain generally from intoxicating drinks, are very sparing in its use also, and it may be considered as being more common with the still lower classes of people.

21. Only flat ganja is used in these parts.

22. Charas is not made here or imported from elsewhere.

23. Bhang is not ordinarily used for smoking. A man whose stock of ganja is exhausted may take to it on the consideration that it is better than nothing. Its effect in smoking is not so good or strong as that of ganja.

24. *Vide* answer to Question No. 20.

25. The dealers say that its use is on the decrease, as the area under cultivation is greatly diminishing since the year 1889 (the first year of licensing the sale), and as their stocks are not being fully sold every year. This may be true, but very difficult to believe when we consider that the annual rents paid to Government are on the increase.

26. The consumers of this drug are never over-intoxicated. The dealers here have only habitual consumers as customers. The consumers of ganja or bhang are seldom beside themselves. A larger draught of bhang induces a greater amount of intoxication, but the smoking of ganja is not said to have such an increasing effect after a certain stage is reached.

27. The consumers are not known to be dangerous to society. They are not known to abuse or beat others. Bairagis use this as incentive for their devotional habits, and they seem to be very earnest in their Bhagana and other services, after they partake of this in company. The heads of native athletic schools called vastads are said to use bhang

with sugar and milk to serve both as a stimulant and renovatory food for the body.

28. Ganja or bhang is sold at 4 pies per tola. At this rate, an excessive consumer may use 4 annas worth of the drug, while a moderate consumer may use about $\frac{1}{2}$ anna worth of this. The quantity of consumption generally depends on the way in which a man spends his time, an idler consuming more and a business man less.

29. No ingredients are ordinarily or exceptionally mixed with this except those mentioned above. (Answer to No. 15.) The dhatura seed is used only by persons who can eat poison and yet bear it, but such men are very rare.

30. The secret consumers alone use it in solitude, but it is best enjoyed in company. Bairagis enjoy it most in this way. Women also use it just like men, but the children do not seem to be allowed its use, until they grow up into men.

31. The habit is easily formed, and it is difficult to break off when once formed. The tendency to excess depends only upon the opportunities one has to use it frequently.

32. No social or religious customs connected with the use of ganja or bhang are known to exist. It is used by the bairagis and others who want to give up society and lead the life of ascetics as a thing that induces concentration of mind necessary for meditation and devotion, and also as one that makes a man indifferent to thirst and appetite.

33. Socially, it is not considered a good thing to use it, and the consumers are condemned as unfit for company on occasions of social gatherings. Even in a religious point of view, it is praised only by those who use it, and public opinion is not so much against them who use it as an incentive to religious devotion. There is no custom of worshipping the plant.

34. It will be a serious privation to the consumers to forego its use in the same manner as deprivation of opium to an opium eater, and of liquor to a habitual drunkard.

35. The use of ganja tells only upon the consumer like that of opium. It does not make the consumer dangerous to society as arrack or toddy. The prohibition of its use entails great hardship on an innocent class of men. It does not seem to be possible to successfully prohibit its use, as illicit consumption is sure to go on.

36, 37, 38, 39. Experience is wanting on these questions.

40. This is seldom prescribed by any native doctors. But those who consume it give it as their experience that it keeps off indigestion, cough or some similar ailments, and that, if they give up its use they will have a recurrence of these complaints. One tells me that, in case of coughs and severe consumption, gauja was tried and found to give relief to some extent, and that it is also used to stop purgings in very serious cases. The Civil Apothecary, Bapatla, reports that, as medicine, the pharmaceutical extract prepared from it is useful in painful affections. It possesses antispasmodic and anodyne powers and is useful in neuralgic affections, whooping coughs, asthma, tetanus and hydrophobia. It is also given to produce sleep. Tincture of Indian hemp is also prepared from the drug. Its use in the form of medicine is not objectionable in the administration. But its being allowed to be used as an intoxicating drug has grave objections since it exercises its most baneful effects on the nervous system.

41. The consumers assert that the use of ganja

and bhang have the three effects referred to in this question. Similarly those who are addicted to tobacco smoking or opium eating affirm that these qualities are inherent in their favourite articles. The use referred to is only moderate habitual use and not occasional use of the drug.

42. The use of this drug tells upon a man's constitution and habits by reducing his appearance and affecting his brain, and rendering him unfit for social enjoyment.

43. They are inoffensive.

44. The immediate effect is refreshing. Intoxication follows later on. Bairagis use it to allay hunger; other classes practise it for creating appetite. The effect of ganja smoking is said to be momentary, but the use of bhang and majum more lasting, from 6 to 10 hours. The after-effects are general weakness and a longing after the thing again, which, if not satisfied, produces uneasiness.

45. *Vide* answer to No. 44. It does not impair the moral sense, but induces laziness. It does not bring on habits of immorality or debauchery. Experience wanting.

47. The habit of using the ganja is not known to be hereditary, nor to have any effect on the children of the consumers.

49. It is said to be used occasionally by prostitutes as an aphrodisiac and also to give staying-power. It is not known to produce impotence.

51, 52, 53 and 54. Toddy and arrack are used by criminals to fortify them in the commission of grave offences; but this hemp drug is never connected with crime in this way.

55. As above.

56. No experience.

57. Ganja is not eaten or drunk in these parts. The dealers say that Hindustani Brahmins of the north are known to be in the habit of powdering the kalle and pepper seed together, and eating the powder with a small quantity of water, with a view to avoid drivel.

58, 59, 60, 61, 62 and 63. The present administration of this drug appears to be sufficient for its purpose. The crop is grown by raiyats without any check. The dealers who purchase the privilege of sale buy the leaf from the cultivators and sell it in licensed places. There are frequent complaints of illicit sale. There seem to be no orders prohibiting the growth of the plant in backyards for private consumption by the grower. This drug is considered as harmless as tobacco. I do not consider that it is necessary to provide for any restraints in its cultivation any more than that of tobacco, as it is not injurious to the public and as Government interference in regard to its growth will unnecessarily cause hardship to innocent consumers. At present there is only one shop for this taluq in an out of-the-way village at Daggapad. Better provision may, however, be made for its sale to public in more places and also for its preparation and manufacture with reference to best medical opinion on the subject.

64. No regulations are in force in regard to the transport of these drugs.

68. There are no shops where consumption on the premises is allowed.

69. The wishes of the people or neighbours are not consulted before the opening of the shop in any locality is sanctioned. It does not seem to be necessary to consult others, inasmuch as the shops are not places of resort for bad men.

70. There are no importations of this drug in this district from other provinces.

46. Evidence of V. KASTHUR CHETTY, Tahsildar of Adoni.

I beg to state that there are none in this taluk who profess to have any special knowledge on the matter.

The hemp plant, that is ganja, is grown in Adoni, Kosgi and Cowtalam in back-yards here and there (one or two trees) for domestic use.

The drug or dry ganja is imported in small quantities from Daggupad in the Cuddapah district, Alamur, Nandyala taluq in the Kurnul district, Shamshabad and Umnabad, Bengal presidency. It is a wild plant grown spontaneously in those places. About 40 or 50 maunds are imported annually.

There is no restriction or prohibition for the cultivation of the hemp plant.

One Gejjai Kanteppa imports the above drug

from the places noted above. He sells the drug to two retail licensed vendors, Kamalpur Nagayah and Anikeri Nogappa of Adoni town. The former pays annually a tax of Rs. 85 and the latter Rs. 180 to the Government.

The drug is sold at a retail price of 4 pies per tola or 8 annas per seer. This is the minimum price at which it can be sold.

About 76 per cent. of the population of Adoni town consume this drug. The class is generally a sect of bairagis, fakirs, sanyasis, and other ascetics devoted solely to religious purposes. It is not used by persons connected with family matters generally.

The subordinate medical staff of officers in the Adoni Municipality and other Hospitals in this taluk is least acquainted with the subject.

47. Evidence of P. S. SINGARAVELU PILLAI, Tahsildar of Erode.

1. I served for eight years in the Abkari Department as Distillery Officer and Inspector.

2. Charas not known in the southern (Tamil) districts. This (ganja) is known as sadai ganja locally. The distinction of round and flat ganja is not known. The manner of manufacturing is to break off the branches or twigs of the ganja plant, spread them on the ground layer after layer, until it reaches a height of about a foot, then place a plank over it and weight it down with stones, etc. Ganja is also known as kalpram.

3. I am not aware of its spontaneous growth anywhere.

4. It is not known by any other name.

5. It is a tropical plant, and wants the same conditions as other tropical plants. I am not aware of any special conditions.

6. Scattered.

7. (a) and (c) Yes. A plant here and a plant there is grown in gardens. There is nothing like systematic cultivation.

8. No.

9. I don't know.

10. No separate class. The ordinary raiyat raises it in his gardens.

11. I don't know.

12. I know that the male plants are extirpated.

13. (a) No.

(b) No.

(c) Perhaps on the Nilgiri and Shevaroy Hills.

14. (a) and (c) Yes. Manufactured in the towns, and to only a small extent.

15. (a) (A).—The twigs or branches of the female plant are broken and spread in layers on the ground to a height of about a foot. Then a plank is placed over the whole, and weighted down and left there for about a month. The place should be dry. Then the plank is removed, and the leaves, which in that time will have clustered into something like small fruits, will be removed and stored.

(B).—The ganja is boiled in milk and strained, Curd is made of the milk and churned. To the butter thus obtained, spices and some medicinal ingredients are added together with jaggery or sugar and a kind of oemfit is made. Another

coarser kind is made by grinding jaggery with ganja leaf and some spices and nuts, such as almonds, etc.

(C).—Ganja flower is ground with cocoanut milk and strained. To this boiled milk, sugar, almond, milk, spices, etc., are added and then it is drunk.

16. Yes.

17. As a special class.

18. Yes; if kept for long. With ordinary care this may last for a year. Exposure acts injuriously on the stuff.

21. There is only one kind of ganja made for smoking.

23. I am not aware of bhang being ever smoked.

24. (a) Bairagis, Muhammadan sepoys and foot-pads eat bhang.

(b) Guzeratis, Maharattas and Rajputs drink bhang.

25. No.

26. (a) 80.

(b) 15.

(c) 4.

(d) 1.

27. (a) Bairagis, sepoys and people who have lived in Northern India.

(b) Bairagis and a few mean men.

(c) People subject to attacks of colic, fever, etc.

(d) Dyspeptics fond of gormandising.

(a) and (b) These have to bear fatigue and go without food for a day or two at times.

(c) To allay the pain.

(d) Luxury.

28. (a) 1 tola, costing 4 pies.

(b) 3 tolas, costing 1 anna.

29. For smoking—

(a) Tobacco to give flavour and heighten the intoxication.

(b) Dhatura and tobacco to intensify the intoxication.

For eating—

(a) Ghee, jaggery, spices, almonds, etc., to render it pleasant to taste.

- (b) Ghee, jaggery, spices, almonds, fig seeds and opium, etc., to intoxicate.
30. Smoking is done in company and eating in solitude. On marriage occasions, among the Mahrattis, Rajputs, and Guzeratis, drinking is done in company. I don't know if females indulge in ganja. I am not aware of children consuming ganja.
31. Yes; easily formed and difficult to break off. The last question depends on the degree of self-control exercised by the consumer.
32. In demon or hero worship, intoxicants of all kinds are offered to the gods and then swallowed by those offering them. In hook-swinging, fire-walking festivals, the operators are drugged with ganja and they become insensible to pain. Yes, regarded as essential. Generally temperate. May lead to the formation of the habit; but does not generally.
33. With disfavour. Yes; public opinion has a bad opinion of the consumer. The sentiment is due to the fact that the consumer becomes lazy and good for nothing. I am not aware of any worship of the kind.
34. It would be a serious privation to a moderate habitual consumer. I am not aware of any special classes.
35. No; not feasible. Yes; illicitly. Yes; it will cause discontent. No political danger. (b) Perhaps opium; but not (a) alcohol.
36. No.
- 37 to 39. I don't know.
40. Yes; as a sedative, in cases of irregularities of stomach and rectum.
I don't know about cattle disease.
41. (a) Yes. To dyspeptics and gourmands.
(b) Yes. To bairagis, sepoys, and footpads.
(c) Yes. To dwellers in malarious tracts and hill villages. But opium is more largely used.
(d) To deaden pain, or at least to induce insensibility to it in painful performances, like hook-swinging, fire-walking, etc.
(a), (b) and (c) Moderate habitual use.
(d) Occasional use.
42. The moderate use is, I believe, harmless in the same way that a pint of beer is harmless.
43. Quite so.
44. It produces a slight degree of intoxication, I believe, and therefore refreshes. Smoking allays hunger, and eating or drinking creates appetite.
- I don't know how long the effect lasts. Yes; the after-effects are languid drowsiness.
45. It weakens the constitution a bit; but I don't think it has effect on the mind or morals. It does not affect the digestion. Excessive smoking is known to produce lung affections. It produces laziness, but certainly does not induce immorality.
47. I don't know.
49. I don't know.
51. I don't know if many bad characters are habitual consumers; but I do know that ganja consumption does not make a man a bad character.
54. The drug will muddle the senses and stupefy. It will render the man unfit for much violent exercise.
55. Yes.
56. (a) For smoking, tobacco is added to give flavour and heighten intoxication. For eating and drinking, the addition of spices, perhaps, adds a little to the effect of the ganja, but not to any extent.
(b) I don't know about dhatura.
57. I don't know.
58. Works well.
60. Cultivation and preparation are not under control, and I will not advocate any modification. Sale is under control, and that is enough.
62. No.
63. None at all.
64. As an old Abkari officer, my honest opinion is that ganja should be let alone in this presidency. It is used by such a small, almost infinitesimal, portion of the population, and its effects are so harmless that I would not interfere with it.
65. There is no taxation except vend rents. The incidence is light.
66. No.
67. None.
68. No.
69. There is no local opinion. But there is no necessity for any. The shops are so few and the drug so inoffensive that I would not interfere with them.
70. The vendors pay for the privilege of selling and that is sufficient.

48. Evidence of S. VASUDEVA RAO, Tahsildar, Tadpatri.

1. Local enquiries made at Tadpatri Kusba town.
2. The definitions of bhang and charas are accepted. As regards ganja it is said that the dried flowering tops of female plants are not used, as they are said to affect injuriously the sight. I am not sure that the people understand clearly the distinction between male and female plants. Bhang, charas and ganja are the names used in this taluk for the three products referred to.
7. The cultivation of hemp-plant, which is extremely limited, is intended for production of ganja only. The cultivation is confined to compounds and back-yards of houses. A few plants are also found grown amidst chilly crops.
8. The cultivation continues to be limited. No variations.
9. The plant is periodically watered. As soon as the leaves ripen the watering is stopped.
10. The cultivators are of the same classes as other agricultural cultivators.
11. Yes; but not in this taluk.
13. Cultivation of hemp plant is not restricted.
14. (a) Yes.
(b) and (c). No.
Very limited extent. The owner of the house

in the back-yard of which such plants are raised uses along with a few friends perhaps.

15. The cultivation is so very limited that there is no special method of preparation at all. Ganja is used only for smoking in this taluk.

16. Bhang is not used or prepared in this taluk.

18. Yes. Ganja cannot be kept for more than a year without deteriorating. Time lessens the stupefying effects of the drug. It keeps better if preserved in granaries inaccessible to molestation of rats.

19. Ganja is used only for smoking in this taluk. Charas and bhang are not used here.

20. Fakirs, Madigas, malas and weavers generally use ganja. Fifty per cent. of the population smoke ganja.

21. What they style "Mulki" ganja is used in these parts. This appears to be more allied to chur than to flat or round ganja. The flowering tops are not subjected to any particular form of pressure. They are allowed to dry and packed up in packets or bundles.

22. Charas is unknown to men of these parts.

23. Bhang is not used for any purpose in this taluk.

24. None.

25. The smoking of ganja is on the increase. It is much cheaper than toddy or arrack, and is therefore made to supersede the latter gradually.

26. The consumers are generally habitual moderate consumers.

27. *Vide* remark against paragraph 20.

28. One tola, valued at 4 pies, is sufficient for a habitual moderate consumer.

29. Tobacco is mixed with ganja for smoking purposes. The object is to lessen the bilious character of pure ganja. Dhatura is not used.

30. The consumers generally practise the drug in company.

31. It is not difficult to break off the practice in the case of moderate consumers. In the case of those indulging in excesses it is very difficult.

33. The use of ganja is held in disrepute by the public. It is perhaps owing to the injurious results that would follow in the case of excesses. No custom of worshipping the plant exists.

34. No serious privation to any class of consumers if they are made to forego the consumption, as there are hardly any who indulge in excess smoking.

35. It is quite feasible in this taluk to prohibit the use of all the three drugs by making the cultivation of the plant and the possession of its products penal. No political danger would ensue. The consumers of ganja will take recourse to drinking toddy or arrack.

36. Yes, due to the gradual increase of the cost of liquor and toddy.

37. Charas is more intoxicating than ganja.

40. External application for scrotum mixed with halva or leham.

41. (a) Yes.

(b) Yes.

(c) Yes.

(d) Not known.

The moderate use of the drug will bring about the above results.

42. Even the moderate use affects health unless proper nourishment is taken.

43. Yes.

44. The immediate effect is that the body gets hot and the man gets slightly intoxicated. It creates appetite. Lasts for about four or five hours. After a meal its effects cease. Want of subsequent gratification unsettles the man by making him bilious.

45. (b) Man gets weak if he does not take good nourishment.

(c) Eventually does so.

(d) No.

(e) No.

(f) No. Moderate use does not produce any of these results. It is only excess use that is likely to produce such results.

46. By excess use men do not stand in need of food. They keep up without nourishment. The result is that physically and mentally the men get impaired. So much so that some get insane. The insanity is however temporary. In the case of two of my peons they had become practically insane owing to indiscriminate and excessive smoking of ganja. They are both doing well now. One has rejoined his appointment.

47 and 48. No.

49. No.

51. No. No connection whatever.

53. Yes, if sufficient nourishment is not taken. No.

54. No. Men using these drugs become timid rather than get bold.

55. No.

57. They are neither eaten nor drunk in this taluk.

60. The cultivation is very limited and requires no control.

61. Charas not produced.

63. None.

66. No such distinction appears to be desirable.

68. There is only one shop at Tadpatri, where the preparations are not consumed, but only sold.

69. Wishes of the people are consulted by the contractor. He selects a site which is least objectionable by way of securing privacy. The police and the Magistrate then give their opinion about the site. It is necessary that public opinion should be consulted in the selection of the site.

49. *Evidence of T. KODANDARAM NAIDU, Tahsildar, Hospett.*

1. Enquiries made for the express purpose of answering these questions.

3. Not spontaneously grown in the Hospett taluk.

14. (a) Ganja is not systematically prepared in this district. The hemp plant is not grown as a regular crop, but one or two of it may be found in back-yards here and there. Some raiyats grow it in their fields, but the plants are generally very few and intended for personal use.

(b) Charas is unknown in this part of the country.

(c) Bhang is likewise unknown.

19. Gauja is not only used for smoking, but it enters also into the composition of certain beverages and medicines. A preparation called majum is made of ganja.

20. All classes use ganja from the Brahmin down to the Madiga. Two per cent. of the population may be said to be addicted to its use.

25. Seems to be stationary. Looking to figures, one may say that it is declining, but experience shows that it is otherwise.

28. Ganja, 3 tolas; value Rs. 0-1-3.

32. No customs alluded to exist in this district except that when a person smokes ganja he invariably hands the pipe to those happening to be with him at the time, provided they are habitual smokers of that drug, and often offers it to strangers as well.

33. The consumption is looked upon as a bad habit. There is certainly public opinion which is not in favour of the consumption. All communities look down upon the consumer, and regard him as low in the social ladder. The use of the drug is in disrepute whatever may be the

form. The hemp plant is not worshipped in this district.

39. Smoking is said to be more harmful because it affects the lungs.

40. Yes, but to very inconsiderable extent. A paste of ganja is applied to sores. It is said to serve the purpose of carbolic acid. The tongues of animals refusing to eat are rubbed over with a powder made of ganja, saffron, and salt. Ganja mixed in gram gives strength to cattle, and keeps them in good condition.

41. Yes.

43. Yes.

44. The immediate effect of the moderate use of ganja is that it removes restlessness and fixes attention on any particular subject. It is said to be somewhat refreshing. It allays hunger, but does not produce it. The effect lasts from 1 to 6 hours. Want of subsequent gratification produces longing or uneasiness in the habitual consumer.

45. A moderate use does not produce any bad effects. On the other hand it fixes the attention of the consumer on objects over which he wishes to devote his time. It keeps down manly power and that is the reason why sanyasis take to it. The consumer is quiet and appears to be in a contemplative mood.

49. Yes; when mixed with opium, etc., and used in the form of electuaries, ganja increases venereal desire.

51. No. It has no connection whatever with crime like alcohol.

53. No.

54. No.

55. No. No.

50. *Evidence of M. BIMACHARI, Tahsildar, Rayadrug.*

1. I instituted special enquiries after the receipt of the order directing me to answer these questions.

3. Not in this district.

14. No; only ganja is imported.

16. Bhang and charas are neither prepared nor used in this part of the country. Ganja can be prepared from the ganja plant or its dry flowers.

19. Charas not being used here. Ganja is used for smoking and in making a sort of sweetmeat. The process of this preparation is that essence of ganja is collected by boiling it with ghee. Then mix it with syrup and poppy-seeds, and spread in places and cut them in square pieces.

20. Generally Rajputs, Muhammadans, fakirs, bairagis, and persons who are supposed to have renounced worldly cares and desires and military people. It is impossible to form the proportion by figures and facts. In this taluk I have found persons smoking in Rayadrug and Kanekal.

24. Bhang is not used in this part of the country.

25. Only isolated instances are found there. From inquiries I have made of the people who are accustomed to the use of ganja, I am of opinion that its use is decreasing on account of restrictions and high prices at which ganja is sold.

28. The average quantity for each man per day is about half tola, and its cost will be three pies in Rayadrug and Kanekal. This is for ganja.

32. Ganja is used only as a religious custom among those who have some veneration for Siva, specially on Sivaratri day. They on that day worship Siva with water mixed with ganja, poppy-seeds, sugar, other spices. This custom is partially observed by Rajputs.

33. It is considered as injurious to health; it disorders the brain, and brings on lung affections. Respectable class of people and officials do not give credit to the statement of the persons who smoke ganja or use bhang. As it is said that Siva even used ganja, Rajputs sometimes worship ganja plant.

39. Smoking ganja is injurious to health because it affects the lungs. Drinking and eating in the form of bhang is not so bad as that of smoking, because in preparing it for either drink or eating, milk, sugar, almond, melon seed, pepper, rose petals, and other ingredients and spices are added to ganja; consequently, these articles being nourishing, tend to counteract the bad effects of ganja. Hukka smoking is more injurious than drinking or eating.

40. Native doctors prescribe ganja cigarettes for asthma. The ashes of ganja are used for

cattle to prevent dysentery. It is also used for men in a delirious state.

41. No; it is condemned.

42. It cannot be considered as harmless, because when it is used it keeps the mind in an unsettled condition, and makes persons laugh within themselves and utter all sorts of words and begin to sing mad songs.

43. Not always; sometimes they are inoffensive.

44. It produces sleep, keeps down hunger, induces them to work even when starving for a length of time. Its immediate effect is that it dries all the moisture on the tongue and lips, and produces a peculiar sensation in the brain when it is taken in the form of beverage. With the ingredients mentioned above it is refreshing. In small doses intoxication is less perceptible. Generally its effect lasts from two to six hours.

Its after-effects are that brain and lungs are involved.

45. First it acts like a stimulant and then as a sedative upon the nervous system.

49. Yes; some native doctors use it in preparing confections.

51. They do not allow their thoughts, under the influence of ganja, to run towards the commission of offences. Criminality cannot be attributed to ganja smokers or drinkers. They would rather beg than steal.

53. It would rather create a suicidal tendency in the man. Excessive indulgence generally produces madness. They generally like solitude to society and disregard their food, dress, etc. I do not know any case in which it had produced homicidal frenzy.

54. No.

55. Yes; complete stupefaction cannot be induced without admixture.

51. Evidence of MUNSHI S. MOHAMED UNWUR SAHIB, *Tahsildar, Suthanapully Taluk, Kistna District.*

1. I consulted several persons who are addicted to the use of ganja, and my information is based on the facts thus elicited from them after careful enquiry.

3. I have no knowledge of any district or districts in which the hemp plant grows spontaneously, *i.e.*, without undergoing the operations of cultivation.

14. Hemp plant is not grown in this taluk, and hence ganja, charas, and bhang are not prepared here from it.

16. Bhang is prepared generally by the people in their houses. It can be prepared from the hemp plant not only wherever grown, but also wherever it is procurable. I have no idea whether ganja or charas can be prepared from the wild plant or not.

19. Charas is unknown in this part of the country. I have no idea of it. Ganja is used to a large extent for smoking.

Bhang is prepared from the leaves and seeds of the hemp plant. The leaves and seeds are ground well with water till it becomes pulpy; then this pulpy substance is strained in a piece of thin cloth and the juicy matter is gathered in a cup; milk, sugar, spices, etc., are added to give flavour to the juice thus gathered. Then this is drunk by the people, and it serves as a beverage, especially in hot season.

Majun.—This is also prepared from the leaves of hemp plant. The seeds and leaves are ground well and mixed with sweetmeat. This serves as a stimulant to people who are accustomed to its use.

Ganja is allowed to soak for a few minutes in water and then squeezed. The juice thus obtained is mixed in the preparation of curry (flesh). The people partake of this, and it is said that its use serves as a stimulant. The places where these are prevalent are large towns, such as Guntur, Bez-wada, and Masulipatam, in this district.

20. Bairagis, sanyasis, and religious mendicants of the Hindu community and fakirs or beggars of the Muhammadan community smoke ganja, and also the retired peons and pensioned sepoys of the native army, and also some low classes,

such as Vudders (tank diggers), Yanadis, and Chundus (village watchers), and Chenchus (hill tribes). The proportion of the people that smoke ganja is approximately one per cent., and even less. Smoking is not confined to any particular locality or localities, but generally throughout the country. Charas is not in use at all in this country.

24. No persons in this taluk either eat or drink bhang.

25. The use of bhang and charas is unknown in this country.

The consumption of ganja for the last three official years is as follows:—

1,296 lbs. for the official year 1890-91.

2,073 lbs. ditto 1891-92.

517 lbs. ditto 1892-93.

From this it is clear that the consumption is on the decrease; but this cannot be taken as a safe guide, for sometimes the ganja smokers get their supply from other taluks, which are nearer to them than the town of Suthanapully, where there is a license-holder for selling ganja.

28. The average allowance of habitual moderate consumers of ganja ranges between half and one tola per diem, and its cost is between two and four pies.

32. It is customary among bairagis, etc., to welcome their friends and relations by offering ganja when they come to see them in the same way as tea or coffee is offered among the civilized people of the West. About half or one tola of ganja is well washed first repeatedly with water in the palm of the left hand, and is squeezed with the thumb of the right hand till it forms into a ball. This ball is put in a small earthen bowl, then fire is put on it and given to the visitor, who smokes by holding the bowl between his two hands. After taking two or three whiffs the bowl is passed on to some others in the company. When this exchange of the bowl takes place, the receiver calls out "Ram! Ram!" and at the same time makes a sort of obeisance to the giver. When the Muhammadans exchange the bowls, they call "Jama Alla!" (society of God); then the receiver calls out "Ishq-i-Alla" (love of

God) and makes some obeisance. The Musalmans place the earthen bowl on the hukka and then smoke.

33. The consumption of ganja is generally regarded contemptuously. Both social and religious opinion is against its practice. Among the Musalmans the use of ganja or the use of any form of the narcotic is forbidden by religion; but among the Hindus, though not forbidden by religion, yet the consumers are treated by their brethren with disregard. The reason why the use of any form of narcotic is in disrepute is that the consumers are generally a set of lazy people, quite averse to work as long as they can help and talk vain stories. I do not know of any custom prevalent among certain sects of the people regarding the worshipping of the hemp plant.

39. Drinking or eating of any preparation of the hemp plant in this part of the country is not in practice, and so it is impossible to say whether smoking is less injurious or not.

40. Ganja is largely prescribed on account of its medicinal qualities by native doctors to cure cough, asthma, rheumatism, and cold. Ganja is not used in the treatment of cattle disease here.

41. The people addicted to smoking of ganja say invariably that its moderate use is very beneficial in its effects, namely, curing cough, asthma, rheumatism, cold, and promoting digestion.

42. As the moderate use of ganja is beneficial in its effects, I think its use will not cause any harm to the consumer.

43. The moderate consumers are inoffensive to their neighbours, and cause no disturbance of any kind to them.

44. The immediate effects of the moderate use of ganja are very refreshing and produce a little mild intoxication. The consumer lies down quietly for one or two hours. The eyes become red. It creates great appetite. There are no after-effects. The want of subsequent gratification produces longing and uneasiness, his thoughts roam about, he feels painful sensation in the limbs, no inclination to eat, he does not seem inclined to follow his ordinary pursuits till his want is gratified.

45. The habitual moderate use of ganja does not produce any noxious effects on the consumer, either mental or moral; but it affects physically, *i.e.*, he gradually diminishes in weight. Even stout people accustomed to ganja smoking become by degrees in the course of a few years thinner and thinner. I have seen many habitual consumers. I did not observe any change either mental or moral when compared with non-consumers.

49. I am informed by native doctors and others that the use of bhang and majun and curry excites aphrodisiac; but, on the other hand, smoking ganja diminishes in course of a few years the manly powers, and hence it is largely and invariably used in this form by the religious mendicants, and devotees both of Hindu and Muhammadan community.

51. In this part of the country, as a rule, the habitual consumers do not come within the category of bad characters.

53. The excessive indulgence in any of these drugs incites to unpremeditated crime. I know a case in which it has led to temporary homicidal frenzy. A certain man of goldsmith's caste, who indulged himself excessively in drinking bhang, squeezed the neck of his own son, about two or three years old, and murdered him, saying that the deity whom he worships directed him to sacrifice his own son. He was not at all sorry for the

loss of his beloved child as long as he was under its effects; but subsequent to the removal of its effects, he was very penitent, and begged that he should be hanged.

54. The criminals do not use these drugs to fortify themselves to commit premeditated crimes as far as my knowledge goes.

55. The criminals, in order to further their designs, induce their victims (generally children and females) to partake of these drugs and stupefy them. The use of bhang or majun, which are palatable, produces complete stupefaction for a short time. While the victims are in that state the criminals remove the jewels, etc., from their persons, and walk away quietly. Sometimes the young women are seduced by their paramours to leave their parents and husbands' houses, and follow them.

Note by the Commission on the case referred to in Question 53, appended to MUNSHI S. MAHOMED UNWAR SAHIB's evidence.

On 12th December 1888 this man caused the death of his son, a child of two years, under the following circumstances. The man dabbled in alchemy and tried to transmute the baser metals into gold, or discover hidden treasure.

Three or four days before the murder, a certain Pandaram (name unknown) came to his house. Under his advice and example, Kuppia smoked ganja, which he had not touched before. He smoked for the last time before 8 A.M., on 12th December. At 3 P.M. that day (according to his own statement, which was accepted as true), "I made the child to sit near the fire. After my return I found the child absent. I caught the child and brought it near the fire. I placed the two palms on the fire and pressed them. The child cried. It was a Kartika Nakshatram day. It came to my mind that it would be better to send the child to God." So he killed the child, and was found lapping the blood that had fallen from its mouth when strangled. There was no evidence of insanity, except the prisoner's wife's. She said that the prisoner was a little insane, and was now and then queer in his manner. After making special medical inquiry as to his state of mind, the High Court passed the following final judgment:—

"The medical evidence does not support, though it is not inconsistent with, the theory that the appellant was irresponsible for his actions at the time the murder was committed by reason of unsoundness of mind. We had placed the case before the medical officer in the manner most favourable to the appellant.

"The plea of unsoundness of mind to a degree and under circumstances sufficient to relieve the appellant from criminal responsibility is not established. On the other hand, the evidence of the Village Munsif and the neighbours suggests that the appellant had, by smoking bhang, produced an irritable condition of mind in which a trivial disobedience on the part of his child stimulated him to an act of gross cruelty, and while he was engaged in it, the recollection that the day was 'Kartika Nakshatram' suggested the destruction of the child's life as a religious act. This act was not that of a man who was, at the time, in the full enjoyment of his mental faculties; but the appellant is apparently responsible for their suspension, and we must affirm the conviction. We, however, commute the sentence to transportation for life."

52. *Evidence of M. SAMBA SIVA RAU NAIDU, Tahsildar, Bellary.*

1. From enquiries made of renters, smokers, and consumers, and from observation of those accustomed to the drug.
3. The hemp plant is known to grow spontaneously in some isolated tracts bordering Nallamalais.
14. (a) Ganja and (b) bhang are prepared in the Bellary district, in scattered localities to a small extent.
16. Bhang is prepared in houses, gardens, or other recreative places. It cannot be prepared from the plant at the places grown, because the leaf has to be dried before it could be used for it. Ganja or charas can be prepared at the places where the wild plant grows.
19. Generally for smoking.
20. Bairagis, fakirs, and mendicant classes generally smoke ganja and charas freely. No particular localities or proportion can be specified.
24. Muhammdans, Gujeratis, and others that have come down from Northern Hindustan eat and drink bhang mostly.
25. There has been an increase in the use of the drugs. This species of intoxicant is within the grasp of the poorest classes. It costs but little, and the habit is easily and readily contracted among the lower orders. Each folk has a tendency to contract the habit and his comrade the tendency to impart it. The drug imported from Daggupad in the Kistna district is said to produce greater intoxication than the local produce. Formerly, strong country liquor was very cheap. Its value has gradually increased though the quality is inferior. Thus the poorer classes have been led to have recourse to ganja and bhang. Hence the increase.
28. Habitual moderate consumers use each per diem 1 tola ganja, cost 3 pies, $\frac{1}{4}$ tola bhang, cost $1\frac{1}{2}$ pies.
32. Before drinking bhang, the preparation is offered to the deity by Hindus as a religious observance. People drink bhang and smoke ganja in pleasure parties.
33. The consumption of these drugs is regarded by the Hindus as a detestable habit. The practice is in disrepute generally in Southern India. The plant is not worshipped as far as known in this country.
39. Smoking is considered a more injurious form of consumption than drinking or eating, for the smoke inhaled affects the internal organs of the stomach.
40. Medical question.
41. Yes; beneficial.
42. Beneficial and harmless if moderately used.
43. Yes; inoffensive.
44. The moderate use of the drugs produces slight intoxication. It is refreshing to some extent. It allays hunger when under the influence of the drug and creates appetite when intoxication gets down.
45. Moderate use of the drugs does not seem to produce any noxious effects so far as known.
49. The use of bhang is practised as an aphrodisiac, but not freely.
51. Not so far as known. The consumers of this drug delight in ideal pleasures and are not known to be freely connected themselves with crime.
53. Not known to incite to unpremeditated crime.
54. Not used for such purposes so far as known.
55. Yes. Instances of this kind are known to have occurred, though rarely. Complete stupefaction is possible when administered in immoderate quantities to people not up to the habit.

53. *Evidence of P. RAM RAO, Tahsildar of Hadgalli.*

14. The preparations are made in India, more especially in Bengal presidency. Charas is used in these parts very rarely. Ordinary bhang is used here.
20. Ganja is used in smoking by bairagis or sanyasis, fakirs, lingayets, jengamas. Charas is used by Muhammdans.
24. Especially the bhang is used by Rajputs, Maravadis, Boyas, and Musalmans. Some of them eat it in a form of majum.
28. The average cost of ganja for every person per diem will be only one anna.
32. Some of the mendicants, under the impression if they take any of these preparations their minds will be devoted towards God.
39. Some say by smoking ganja they will get chest diseases and brain affections. Sometimes many of them turn mad by using much ganja. Eating ganja is not more injurious to the health than smoking it.
40. Some of the native quacks use ganja as medicine for cattle diseases.
41. Yes.
44. Some say that the moderate use of ganja will increase appetite. It will produce intoxication if it is used newly. Its effects will last about 6 hours. Afterwards it will cause uneasiness and longing.
45. Yes.
49. Yes.
- 54 and 55. .

54. *Evidence of ADAKI JAGANNADHA RAO, Brahmin, Acting Tahsildar, Hindupur, Anantapur District.*

1. As I am a public servant of 12 years' standing, I have had several opportunities of obtaining information regarding matters connected with hemp drugs in the Madras, Cuddapah, Nellore and Anantapur districts.

2. The terms siddha-patri, ganja and bhang are used for denoting dried ganja leaves.

3. I have not seen the hemp plant growing spontaneously; but raiyats grow it purposely for private consumption or sale.

4. Ganja or bhang or siddha-patri.

7. Hemp plant is cultivated by raiyats on portions of their fields (a) for production of ganja; (b) for use as bhang; (c) for its fibre.

8. The growth of hemp plant is not prohibited by abkari laws. There has, therefore, been neither increase nor decrease in the area under such cultivation in back-yards and fields and gardens attached to *mutts* of lingayats.

9. Where the seeds are thickly sown in a hot-bed, the seedlings are transplanted.

10. Linga Baliyas are much addicted to ganja smoking. Muhammadans use bhang. Other agricultural cultivators rear the plant for speculative purposes.

13. The cultivation of the hemp plant for ganja is not restricted in the Madras Presidency. But the sale of ganja without a license is an offence under the Madras Abkari Act, 1886.

14. (a) and (c) are prepared in this taluk.

15. (A) Dried ganja leaves are mixed with tobacco for smoking purposes; (B) habitual smoker of ganja at times uses ganja leaf for eating; (C) liquid preparation called ramarasam is prepared by Marathis on festive occasions to keep their spirits up.

16. Bhang is prepared generally by the people in their houses.

17. Muhammadans, Linga baliyas, bairagis and boyas.

19. Ganja is used for smoking and drinking purposes. A sort of beverage is prepared from ganja leaf like tea by Kshatriyas and Marathis. The preparation is styled "ramarasam."

20. Muhammadans, lingayats, bairagis and boyas smoke ganja in this taluk.

21. Chur is preferred for smoking.

23. No distinction is drawn between ganja and bhang in this taluk.

24. Muhammadans, bairagis, lingayats eat or drink bhang.

25. It is on the increase, as it is cheaper than arrack. A man with smoking one pie worth of ganja can have as much intoxication as one that drinks one drachm of arrack. Further, the use of ganja can be done more secretly than the use of arrack.

26. Lingayats are habitual moderate consumers. Bairagis are habitual excessive consumers. Kshatriyas are occasional moderate consumers. Boyas are occasional excessive consumers.

27. Men of sedentary habits contract the habit of smoking ganja. Persons of voluptuous habits smoke ganja or bhang, for it is highly aphrodisiac.

28. (a) One-fourth seer of 21 tolas = $1\frac{1}{2}$ annas.

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(b) Half seer of 21 tolas = 3 annas.

29. Only tobacco is mixed with ganja. Dhatura is mixed with ganja by criminal classes to facilitate robbing the victims. No bhang massala is used here.

30. Ganja smoking is usually practised in company. It is not confined to the male sex. It is practised by adults. It is not usual for children to consume any of these drugs.

31. The habit of consuming any of these drugs is easily formed. It is difficult to break off. There is a tendency in the case of ganja or bhang for the moderate habit to develop into the excessive.

32. In marriages and festivals the use of the drug is regarded as essential. It is generally temperate. It is used by Marathis and Kshatriyas on such occasions to keep up their spirits.

33. The consumption of these drugs is generally abhorred. The person that uses bhang or ganja is looked upon as a bad character. There is no custom of worshipping the hemp plant.

34. It would be a serious privation to forego the consumption of the drug they use.

35. It would not be feasible to prohibit the use of these drugs. The drug would be consumed illicitly. The prohibition would occasion some discontent among the consumers. Such discontent would not amount to a political danger. The prohibition would to some extent be followed by recourse to (a) alcoholic stimulants; (b) opium.

36. Alcohol is now being to a certain extent substituted for these drugs by the rich who can afford to buy costly liquors.

39. There is a popular belief that smoking ganja is a less injurious form of consumption than drinking or eating the same.

40. Ganja leaf is used by quacks. The leaf is applied externally when a man is suffering from stomach ache. These drugs are not used in the treatment of cattle disease.

41. The moderate use of charas, ganja or bhang is beneficial in its effects—

(a) as a food digestive;

(b) to alleviate fatigue;

(c) as a febrifuge.

The drug is prescribed by bakims. I refer to the moderate occasional use of the drug.

42. Even the moderate use of these drugs cannot but produce deleterious results in the long run, as it is a physiological principle that the use of stimulants is ever followed by subsequent prostration, as stimulants cannot but draw upon the bank of Nature's forces.

43. Yes.

44. The immediate effect of the moderate use of ganja is refreshing. It produces intoxication. It increases appetite. The effect lasts for an hour or so. Subsequent prostration is the after-effect. The want of subsequent gratification produces uneasiness.

45. (b) It impairs the constitution.

(c) It induces habits of immorality or debauchery.

(f) It produces insanity in some cases.

(g) No.

47. The habitual moderate use of ganja appears to be a hereditary habit.

48. Yes.

50. The excessive use of ganja or bhang leads to an untimely grave.

51. Yes. Ganja smokers are gamblers and thieves.

52. The excessive use of ganja or bhang makes a man loose in morals.

53. Yes. Excessive use incites to unpremeditated crime. I know of no case of temporary homicidal frenzy.

54. Yes.

55. Yes. Dhatura seeds are mixed with ganja leaf.

56. The admixture of tobacco with hemp does not increase the effects of hemp. Dhatura is admixed for being administered to others.

57. Ganja, when drunk in the shape of ramarasam, is more intoxicating than liquors.

58. It is capable of improvement.

59. The cultivation of the hemp plant should be attended with the same restrictions as the cultivation of poppy plants.

60. The system requires modification in respect of laying restrictions on the cultivation of the hemp plant.

61. Charas is not produced in this province.

62. Yes. Village karnams may be asked to enter in the monthly cultivation account the area of ganja cultivation.

63 and 64. No.

65. Reasonable.

66. Not necessary.

67. No.

68. No. The brothels should be stifled.

69. The magistracy and the police are consulted. The local public opinion may be considered.

70. There are no facts regarding importation or smuggling of hemp drugs from Native States. Yes, duty is really paid. There is no general use of untaxed drugs.

55. Evidence of G. JAGANNAYAKULU, Acting Tahsildar, Gooty.

1. On enquiries made at Gooty.

2. These definitions are quite acceptable. Persons who use ganja are not able to distinguish between male and female plants. Bhang, charas, and ganja are known here by the same names.

3. I have no knowledge of other districts, except this district. It grows spontaneously here and there in parts of the country.

4. It is known as ganja and bhang. These refer to the same plant.

5. No special conditions appear to be necessary for its growth but that it requires watering often.

6. Scattered ordinarily.

7. There is cultivation only in back-yards of the hemp plant for purposes given in (a) and (c).

8. No increase.

9. Seeds are first sown and then covered with a layer of earth and watered. The seeds sprout in a week and are transplanted.

10. Sanyasis, fakirs, and jogis generally cultivate the plant. They are quite different from the agricultural class.

11. Yes.

12. Nil.

13. No.

14. (a) and (c) are prepared to a small extent in the back-yards of houses.

15. No difference between the wild plant and the cultivated one.

16. Not prepared in houses. Can be prepared from hemp plant wherever grown, as also ganja. Charas is not prepared in these parts.

17. Mostly Musalmans.

18. These three products deteriorate if kept over for two years, and the efficacy is lost entirely after a lapse of four years. No special measures are known to prevent deterioration, except by keeping it from being meddled with by rats and insects, and from exposure.

19. Charas is not to be had here, and nothing can be said here regarding it. Ganja is used for smoking and also for manufacturing a legam called

purnathilagam. Ganja is grown here and there in this taluk.

20. Sanyasis, jogis, and fakirs use ganja for smoking wherever they are, and in all parts. Twenty per cent. of the population may be considered to be using ganja.

21. I think round. The smokers of ganja are not able to say decisively about it. The flowering parts of the plant are not given any pressure to assume a certain form. The dried ones are used as they are.

22. Charas is not used.

23. Bhang is not used for smoking.

24. Sanyasis, bairagis, jogis, and fakirs eat and drink bhang wherever they are found in this taluk.

25. It is on the decrease, as it is sold at a higher rate than before.

26. Not able to give.

27. It is only among fakirs mostly that the above classes are taken from, who go a-begging.

28. (a) Quarter of an anna in weight, worth the same price.

(b) One anna in weight, worth the same value.

29. (a) Tobacco.

(b) Dried ginger and jaggery. Dhatura not used. These admixtures are used to add to the taste and to lessen the intoxication. Bhang masala is not known here.

30. Ganja and bhang are more used in company than in solitude. It is confined to the male sex. It is not given to children at all.

31. The habit is easily formed and can easily be broken off. There is no tendency, it is stated, to develop from moderate into excessive habit.

32. There are no customs, social or religious, regarding the use of these drugs.

33. There is no public opinion prohibiting the use of these narcotics, at least among the lower orders of the population. No custom of worshipping the plant exists.

34. No serious privation to habitual moderate consumers by preventing them to consume the drug they use.

35. It is feasible to prohibit the use of these drugs by heavy duty. It would be consumed illicitly. The prohibition will cause much discontent among the consumers without any political danger. The prohibition will lead the consumers to take recourse to alcoholic stimulants.

36. It cannot be stated.

37. Charas is not known here.

38. It cannot be said.

39. Smoking ganja is less injurious than eating and drinking bhang. Reasons cannot be given.

40. Bhang is said to be used on account of its medicinal properties. Bhang leaves are used for cattle for nourishment.

41. (a) The moderate use of bhang gives the effect of increasing the digestive process.

(b) The smoking of ganja alleviates fatigue.

(c) Bhang and ganja are used as a preventive of disease in malarious and unhealthy tracts.

The moderate habitual use that is referred to as regards (a), the moderate occasional use that is referred to as regards (b) and (c).

42. The moderate use of these drugs is stated to be harmless. Reasons cannot be given.

43. Inoffensive to their neighbours.

44. A habitual consumer, taking a moderate quantity of any of these drugs, will feel giddy and then intoxicated. It does not allay hunger, but increases appetite. It has its effect for an hour or two. The want of subsequent gratification does not produce any longing or uneasiness after food is taken.

45. (a) None.

(b) to (e) No.

(f) It does not deaden the intellect or produce insanity.

46. No cases have come within my experience. But it is said that, owing to excessive use of ganja, as any other stimulant, lessens the appetite, and works both upon the body and mind so as to impair the physical and mental faculties. Such consumers will, however, be restored to their former vigour by moderate use of the drug and proper nourishment.

47. No.

49. It does not produce impotence.

53. It does. I have heard of a case that a Muhammadan peon, owing to excessive use of ganja, had become so intoxicated that he beat an old man, who happened to pass before him, to death. The latter appeared to the Muhammadan as a pig in his intoxicating mood, and he, according to the principles of his religion, smashed the head of the old man with a stick.

54. No.

57. These are neither eaten nor drunk in these parts.

60. The cultivation is scarce.

61. Charas is not produced here, nor is it used.

68. In this taluk there are four shops where the drugs are sold. The buyers do not consume them in the places where they are sold.

69. Wishes of the people are consulted before any shop is opened. The least objectionable site will be selected, approved by the police and magistracy. Public local opinion should be considered.

56. Evidence of CHAGANTI SOMAYAJULU, Brahmin, Acting Tahsildar, Palakonda.

1. As a Taluk officer for 11 years, I have had to inspect opium and ganja shops at times.

14. Ganja is prepared in this, Cheepurupally, Vizianagram, and Vizagapatam taluks. Bhang also in Vizianagram. It is prepared to a moderate extent.

16. By those who are addicted to it, bhang is prepared generally in their houses in Vizianagram. It can be prepared from the hemp plant wherever grown, but the material got from Calcutta and Benares is preferred. Ganja also can be prepared from the hemp wherever it is grown. I know nothing of charas.

19. Ganja is used only for smoking.

20. All Hindu ascetics known as bairagis and sanyasis, some Muhammadans, and some lower classes of Hindus smoke ganja. Retired sepoys also are in the habit of smoking this. A large number of smokers will be found in Vizianagram, Vizagapatam, Bilamanchelli, and Anakapalli. Their proportion may be estimated at about 2 per cent. of the population.

24. So far as I know, it is only in Vizianagram that bhang is used mostly by those who belong to the Bengal Presidency, and who have visited Benares and other places. Hindustanis and some Brahmin students and pandits consume it to a large extent. The number of such men may be estimated at about 3,000.

25. Cannot say.

33. The use of ganja and bhang are looked down as disgraceful. In these parts the consumption of ganja and bhang are considered socially and religiously objectionable. These drugs are held in disrepute, as they intoxicate and gradually enfeeble the constitution and make one impotent.

39. Smoking is considered to be more injurious than eating and drinking. Smoking gradually weakens the chest, stoops down the consumer, renders the countenance ghastly, and makes one timid and impotent.

40. Opium is the only drug which is medically used in cases of diarrhoea, dysentery, cough, etc. Bhang and ganja are not used medically in general.

41. Moderate use of bhang may be somewhat beneficial, but that of ganja and charas is not.

42. Bhang moderately used is considered to invigorate, but it enfeebles the man when the intoxication is over. Ganja and charas are always injurious, as they tend to diminish the brain power, spoil the countenance, weaken the constitution, and gradually emaciate the man.

43. They may at times be boisterous; generally they are inoffensive.

44. The immediate effect of the use of these drugs is drowsiness and stupefaction. I don't know if it is refreshing. It produces intoxication. Ganja allays hunger, while bhang kindles appetite. The effect lasts according to the quantity used, and generally it lasts for an hour.

The after-effect is that the limbs become languid and weary, and, if not repeated at stated intervals, there will be uneasiness and a great longing. This is more in the case of ganja and charas than in the case of bhang, which a consumer can afford to give up for some time.

45. There used to be two peons in my father's service for about 12 years. They were both addicted to smoking ganja. They were at first smart and good looking, and by smoking ganja gradually acquired an emaciated countenance, timidity, and were gradually bent down, and became very weak and unfit for active work, and were ultimately discharged.

When in school, two boys of my class who belonged to the native regiment stationed at Vizianagram, acquired the habit of smoking ganja and maddak from a bairagi, who used to frequent their house. These two boys were at first very smart and intelligent, and used to get up their lessons very well; but within a year and-a-half after they learnt smoking ganja they became languid and drowsy, and gradually gave up their studies and left the school. A few more cases may be mentioned, but their history is the same.

54. No.

55. Yes. Complete stupor cannot, I hear, be induced without the admixture.

Oral evidence.

Question 1.—I have been about 19 years in Government service, and my age is forty-one.

Question 35.—If the cultivation of the hemp plant were prohibited in the hill tracts, I do not think serious discontent would be caused, because the people in the Agency are well supplied with opium, which they get cheaper than the low country people do. In the low country the hemp drugs are being consumed to a greater extent, because opium and liquor have risen in price. A part of my present charge is in the Agency, viz., the Sitampeta tract. The opium traffic in the Agency is a Government monopoly, as it is in the low country; but the drug is supplied cheaper in the Agency in order to avoid causing discontent.

Question 45.—I do not know how the two peons learned the habit of smoking ganja; but probably it arose out of their association with sepoys of the Maharaja of Vizianagram. They gradually increased the habit until they smoked a pipe every hour or half hour. The Maharaja's sepoys with whom the peons associated were men of Hindustan. They were men of bad character.

The boys were about 10 years of age, sons of sepoys. They did not learn to drink. They continued to use the drugs as long as I knew them, that is, until they were 18 years of age. They began taking the drugs stealthily; but after four years they took them openly. Their fathers, who belonged to a British Native Regiment, were alive, and must have known what was going on. Their mothers had died, and they used to smoke in the presence of other female members of their families. They lived in adjoining houses. Such cases are not common.

57. Evidence of A. KATCHAPESWARA IYER, Brahmin, Stationary Sub-Magistrate, Cuddapah Taluk.

1. I have had no opportunity of knowing any important information about hemp drugs till the receipt of the memo. of questions under reply. Since the date of its receipt, namely, 25th October last, I have made searching enquiries in and around Cuddapah regarding the cultivation or growth of the hemp, its preparation and consumption or use, as well as its effects. My answers are based upon the knowledge thus acquired.

2. The description given by Dr. Prain of the three narcotic articles obtained from hemp may be generally accepted, except for bhang which in this part of the country is not known as siddhi, subji or patti. It is also not the name given to the dry leaves of the hemp plant, male or female. It is a name given to the dry leaves found in and around the flower tops of the female plants only. Subji is known to be the name of a preparation from ganja described later on. The practice of manufacturing ganja by being trodden under foot does not obtain, both as regards flat and round ganja. Round ganja is imported. The ganja manufactured here is flat, and the process of its preparation is as follows:—

In the month of January the branches containing the flower tops are cut, collected and exposed on a hard surface and, after being dried to a moderate extent, compressed into bales of two maunds each. No machinery is used for the compression. The pressure caused by the ropes passing round the bale reduces the flower tops to a flat shape. The exposure above referred to takes place only during the day. At nights they are heaped up and covered with straw to keep off the dew, which is said to discolour the drug and thereby reduce

its market value. Bhang is not separately prepared. The cultivating raiyat does not trouble himself with the separation of bhang leaves from the flower tops. The whole is compressed into bales and sold. These leaves mostly fall off of their own accord when the flat shaped ganja is handled. They are, however, collected by the sellers and sold as bhang leaves. The consumers also separate such leaves when they are found in the ganja they buy and make use of it as bhang.

The imported and the locally made ganja are known by the following names:—

- | | | |
|-----------------|---|---|
| (1) Mulki | . | Local. |
| (2) Almoori | . | From Bezwada and its surroundings. |
| (3) Shamshabadi | . | From Hyderabad, etc., (this is round shaped). |
| (4) Javvaji | . | From Madras. |

The Mulki ganja above referred to is also known as Alwarpatrica, Gyanapattrica.

3. I am not aware of any.

7. (a) Yes.

(b) No.

(c) No; except as already stated above.

(d) No; but the seeds that fall off in the process of exposure are collected and kept for future cultivation.

It is cultivated in the following places so far as I know:—

- (a) Cuddapah Taluk—(1) Kammavaripalli, (2) Gollapalli, (3) Mittamidipalli, (4) Letapalli, (5) Chennampalli (6) Cuddapah town

(b) Jammalamadugu Taluk—(1) Gandicota.

(c) Pulivendala Taluk—(1) Vempalli.

The cultivation in Cuddapah town is for home consumption only: in other places it is cultivated for sale: between four and five acres in Cuddapah Taluk form the area of the present cultivation. I hear that in Jammalamadugu and Pulivendala it is between seven and eight acres.

8. There has been considerable decrease in the extent of cultivation owing to (a) personal annoyance, (b) pecuniary loss since the introduction of taxation.

(a) Personal annoyance.

Prior to the introduction of tax for ganja there was a cultivation of larger area ranging from 20 to 25 acres in the different places. The raiyat was then at liberty to sell the drug to whomsoever he liked and had not the worry and annoyance of the contractors and the subordinate police as well. The raiyat is now at the mercy of the contractor to whom alone he is bound to sell at whatever price he may fix, which is generally low. If the raiyat does not agree to the terms, the contractor has recourse to other places, leaving the local commodity to rot, which results in loss to the raiyat. The contractor gains the good-will of the police and begins to harass the raiyat on the pretext of smuggling, which sometimes may not altogether be without foundation. There would appear to have been a very close check by the contractor upon the outturn of the product. The raiyat heaps up the bales pending sale sometimes in open place and other times in his house. If from natural or other cause, such as damage by rain and dampness and destruction by insects and rats the raiyat removes the damaged portion and throws it away, advantage is taken of the circumstance by the contractor who at once harasses the raiyat by dragging him to court for smuggling. Now, the police rush in. If the raiyat comes to terms, the matter is dropped; otherwise a case is made out and the unfortunate raiyat has to undergo the ordeal of a trial and to take his lot.

(b) Pecuniary loss.

The average outturn of a fair crop is said to be 40 bales per acre. Formerly each bale fetched Rs. 3 to 4 owing to competition and freedom of trade, but now it has fallen to from 14 annas to Rs. 3 for reasons stated above. Further, the crop has to be raised on a bhagayati or garden land which is far superior to ordinary dry land. It is an eight-month crop, which may profitably be substituted by two dry crops and all annoyance may thus be saved.

9. The ground is very well manured and ploughed at the fall of the first shower, and after the fall of the next shower it is sown by means of seed-drills. For every two months it is weeded. Between the 4th and 6th months, male plants appear. These are removed as they are discovered. The crop is occasionally watered whenever sufficient moisture is wanting. On the 8th month it is cut.

10. No. Yes.

13. The cultivation is not restricted, but still it is not carried on in all the villages. Only garden lands of ordinary fertility are selected.

14. Ganja and bhang are prepared as explained in answer to Question 2. Charas is not prepared here. The extent to which ganja is prepared has already been stated in the answer to Question 8.

15. There is no wild hemp here. The method

of preparing ganja (cultivated) has already been explained.

A. *Smoking*.—There is no special preparation for this. The consumer takes a small quantity of ganja, cleans it with water five or six times, then rubs it well on his palm until it forms into a spongy substance, mixes it with tobacco in the proportion of two to one, and puts it into a pipe and smokes. This preparation is called sukka.

B. *Eating*.—There are three preparations for eating, namely:—(1) Majum, (2) Ganja halwa, (3) Bhangdalli.

1. *Majum*.—Prepare treacle or molasses out of jaggery or sugar and mix with it cleaned ganja in the proportion of 4 to 1; stir up the two together till the ganja is well broken into small pieces and becomes mixed up with the treacle; then cool it. It will become solid and fit for consumption. This preparation is made and sold by the contractor in small pieces.

2. *Ganja halwa*.—Take a convenient quantity of ganja, remove the seeds, wash it five or six times, and then put it into a pan and boil it in water. In the course of boiling add a small quantity of broken poppy-heads; when both are well cooked add ghee. The essence of ganja and poppy is drawn into the ghee which is extracted and secured in a jug. Again a treacle of sugar or jaggery is prepared with which spices, kas kas, almond and dried grapes are mixed. A small quantity of the prepared ghee above referred to is then added, and the whole is properly stirred up and cooled. This is called ganja halwa.

3. *Bhangdalli*.—Meat, ghee and bhang cooked together mixed with ordinary curry massala forms bhangdalli.

C. *Drinking*.—The preparation of ganja for drinking purposes is called here subji. It is prepared as follows:—Remove the seeds and sticks from the ganja, and take it—or if bhang leaves are available, take it—wash either six or seven times to remove the sticky substance, grind it well with water, make it into a pulp, get bhang massala consisting of dry ginger, pepper, sopu, cardamoms and rose buds, and grind all these into a pulp; mix the two pulps together and add sugar or jaggery, milk, plantain fruit and spices according to the taste, convenience and means of the consumer.

16. (a) Yes.

(b) I do not know if it can be prepared from the hemp plant wherever grown.

(c) I know nothing about the wild ganja.

17. (1) The respectable class of the consumers who belong to almost all sections of the community have generally recourse to majum and halwa above referred to. (2) The hermit class, consisting of fakirs and sanyasis, smoke. (3) The others take to all the preparations according to their means and convenience.

18. Ganja and bhang leaves can be preserved for a year with ordinary care by occasional exposure to the sun. After a year their properties are diminished. I know of no measures which can prevent deterioration.

19. Ganja is not only used for smoking, but also for the various purposes noted above. Charas is not available here.

20. What class of people smoke ganja is detailed in the answer to question 17. From what I have been able to gather, it may be said that about 5 per cent. of the population smoke ganja. There

is no particular place allotted for it, although in towns the lower order and fakirs or sanyasis collect in makam or mutts and smoke.

21. All kinds are preferable for smoking.

23. My enquiry shows that bhang leaves are not used here for smoking.

24. *Vide* answer to Question 17.

25. No marked increase or decrease within the last five years is perceptible.

26. (a) 25 per cent.

(b) 50 per cent.

(c) 10 per cent.

(d) 15 per cent.

27. Habitual moderate consumers are generally of the lower order of the population, while the habitual excessive consumers form the fakirs and dervishes and their followers. The occasional moderate consumers come from the class of men above the lower order, while the occasional excessive consumers generally belong to the lower orders of the Muhammadan, Rajput and Mahratta communities.

29. No other ingredients than those already mentioned are mixed. Dhatura is not used here nor sold for the purpose. The articles which form bhang massala are stated in the last paragraph of answer to Question 15.

30. About 75 per cent. of the consumers prefer company, 5 per cent. seek solitude, and the rest are indifferent. It is not confined to any time of life. Drinking and eating are partaken by low class of females also, while smoking is not. Children above ten years begin to contract the habit.

31. Yes.

32. There are no customs, either social or religious, but the habit is contracted by association.

33. When fakirs and dervishes take it, it is not considered objectionable; but in the case of others it is considered degrading. Society views the practice with disfavour. Smoking, drinking, eating or having recourse to any other form of the narcotic drug is in very great disrepute with the majority of the population, because the man using it, besides being a burden to the family, is useless to society. No custom prevails here of worshipping the hemp plant.

34. In the case of fakirs and dervishes who have little to do in the world, it will be a serious privation. All that they have to do is to go about begging and to spend the day in intoxication. They probably cannot do without it. In the case of others, I do not think the privation will be serious. About 20 per cent. of the consumers may feel it a serious privation.

35. There can be no possible difficulty in prohibiting the use of this drug. No doubt they might be consumed illicitly. The prohibition can be enforced by making it penal to cultivate the hemp plant without previously obtaining the license for which a heavy fee should be fixed. As the taxation of ganja has already decreased the extent of cultivation, this license system would in the long run dissuade the raiyats from cultivating it. There might be disappointment, but not discontent by the prohibition. This would not create any political danger any more than the prohibition

of the manufacture of earth-salt has done. Some of the consumers would no doubt have recourse to other stimulants or drugs.

38. Round ganja is said to be more intoxicating than flat ganja. I am not in a position to compare it with chur.

40. Ganja is used by native doctors for medicinal purposes. It is also used by raiyats for the treatment of rinderpest among cattle.

41. (a) The moderate use of ganja mixed with medicine is said by native doctors to be conducive to digestion.

(b) People addicted to ganja are said to be, when under its influence, capable of physical efforts above their ordinary powers; but a reaction soon sets in which takes away their powers of endurance, and they break down.

(c) I have ascertained from ganja consumers as well as native doctors that the use of ganja acts as a prophylactic against fever. People using ganja here take it for its narcotic effects rather than for any beneficial purpose.

I refer to moderate occasional use.

43. Yes.

47 and 48. The habitual moderate use of ganja does not appear to be a hereditary habit or to affect the children of the moderate consumer in any way.

51, 52 and 53. No.

55. (a) Yes; I have instances in which culprits have stupefied children by majum and removed ornaments from their persons.

(b) No.

58. I consider the present system of excise administration in respect of hemp drugs capable of improvement.

59. The improvement which suggests itself to me is the introduction of a license fee for the cultivation of the plant. My object is to prohibit the use of the drug without causing serious discontent.

60. It is not controlled. The raiyat is at the mercy of the contractor and the police as already stated.

62. No; it is impossible.

63. I object to the system of both wholesale and retail vend of ganja or bhang or any preparation thereof, and I would abolish all tax, because—(1) the worry, annoyance and loss to the raiyats could be avoided; (2) the opportunities to the subordinate police for unnecessary interference will be minimised.

In connection with this I may state an instance which came to my notice in which an innocent man had been dragged into the Court with a charge of having smuggled ganja and convicted on the strength of the evidence produced.

67. I object to the taxation for reasons already given.

68. There are licensed shops for the sale of ganja and its preparation.

Nothing peculiar about it.

69. It is not necessary to consult the views of the people in any locality before opening a shop there.

58. *Evidence of K. RAMA KRISTNA BRAMHAM, Brahmin, Stationary Sub-Magistrate, Kudlighi, Bellary District.*

1. I have not had very many opportunities. For the last two years I have been a Magistrate, and have had to make enquiries now and then regarding the habits of people. In the course of such enquiries, I happened to know something about the use of hemp.

3. Bellary. It is abundant.

14. Ganja and bhang. They are prepared to a pretty large extent.

16. Bhang and ganja can be prepared in their houses easily by the people.

19. Ganja is used for smoking only.

20. Chiefly Boyas; Lingayets and religious mendicants of whatsoever class also use it. Three-fourths of the males amongst Boyas are believed to have been addicted to it. Amongst Lingayets it can be said that one-fourth of the males have been so addicted.

24. Eating and drinking of bhang are used equally. They take place only on festival days.

25. Is on the increase. Ignorance and association.

28. Between six and nine pies a day. Each man is supposed to use two and a-half tolas a day.

32. In the places I have known, religion has nothing to do with the use of these drugs. On occasions of social gatherings such as marriages, and also when large numbers are collected at car festivals, etc., the drug is mixed up in eatables just in view to make a fun of the people who ate them when they get into delirium.

33. Certainly the use of these drugs is held in disrepute. People addicted to them are held in low estimation. This is on social grounds. The reason is that all intoxicants are so regarded amongst the Hindus. There is no custom of worshipping the plant by any class of people.

39. No; eating is considered less injurious to health than smoking of any kind. Smoking is considered to induce consumption, and other diseases of lungs and chest.

40. Yes; the plant is used by native doctors as an astringent and tonic.

41. I think so; very moderate use will act as a prophylactic to certain diseases, especially fevers, cold, etc.

42. *Vide above.*

43. Quite inoffensive.

44. It is refreshing after long habit; of course it causes intoxication. It does not allay hunger. On the other hand, it creates appetite. The length of the time for which the effects last depends on the quantity used. For a moderate consumer, the effects are believed to last for six hours.

45. Any use of the drugs will tell more or less according to the extent to which the consumer is addicted to it, upon both his physical and mental conditions. But I have seen no case where a man's morals are spoiled on this account.

49. No.

51 to 53. No. People, by the use of these drugs, become more and more timid and will be quite unfit for any violence.

59. *Evidence of M. SESHACHALA NAIDU, Bahiya, Pensioned Tahsildar, Vellore.*

1. From personal experience and from information obtained from the manufacturers of hemp drugs.

2. According to the definition given by Dr. Prain, bhang only appears to be in use in this (North Arcot) district.

3, 4, 5 and 6. I have travelled over many districts and States in this presidency, *viz.*, from Travancore to Bellary; was a Tahsildar in Coimbatore, Bellary, and Anantapur districts, but I have not seen or heard that hemp plant grows wild in any of these places.

7. I hear hemp plant is cultivated in the Javadi Hills, Polur and Vellore taluks, in this district.

I have seen Pandarums cultivate small plots of ground attached to their matams in Quilon, Travancore State, and Mattoopolliam, Coimbatore district, for use as bhang.

8. I don't know.

9. No special knowledge is required for the cultivation of hemp plant. It is cultivated in drills or in beds.

10, 11 and 12. Don't know.

13. A moist climate, rich soil, excessive rainfall, are necessary for the luxuriant growth of cultivated hemp. Elevation is not very necessary, as it can be cultivated in plains also.

14. Bhang appears to be prepared in this district.

15. From the cultivated hemp, the following preparations appear to be made:—

(a) *For smoking.*—Bhang Thum.

(b) *For eating.*—Majum, purnathy, bhang balls.

(c) *For drinking.*—Ramarus, panakum.

Method of preparation:—

(1) *Majum.*—The hemp leaves are first fried, then pounded into fine powder and mixed with jaggery syrup. The manufacturers then add rose, senna leaves, sompu, and spices, make them into balls, and sell them to the public.

(2) *Purnathy lahiyam.*—The leaves are first soaked in water and the next day washed seven times with water. Then they are mixed with ghee and water, boiled for two or three days, and strained; then the water is poured out, and the ghee collected. Akroot, salamisri, rumamas taki, senna leaves, rose, sompu, milk boiled, hard raisins, dates and sugar, are mixed with the ghee, and used as medicine.

(3) *Bhang balls.*—The bhang leaves are boiled for half an hour, washed four or five times with water, some pepper and salt are added, and rolled into balls and sold.

(4) *Ramarus*.—The leaves are boiled for quarter of an hour, washed four or five times with water, ground and mixed with water and strained; again they are ground twice or thrice, strained and mixed with water. They then add poppy-seeds, senna leaves, limes, rose, sompu, and kopra, and again grind mix it with water and strain it. Then they add milk and sugar. This preparation is said to be very cooling to the body.

(5) If a great quantity of water and jaggery are added, it becomes panakum.

(6) Bhang Thum.—Wash the leaves four or five times with water, then crush them by placing them in the middle of the left palm, and pressing them with the thumb of the right hand, add a small quantity of tobacco. This is placed in a pipe and smoked.

Hemp leaves are also mixed with mutton, boiled and eaten. This appears to be very intoxicating.

16. Bhang is prepared by the cultivators in their houses.

17. By the confectioners generally. Mahrattas, Bondilas (originally people of Buudolkund in Northern India), Rajputs, Pandarums and Musalmans also prepare.

18. Bhang leaves can be kept for a long time, provided they are exposed to the sun often; otherwise they will become mouldy.

19, 20, 21, and 22. Don't know.

23. Mahrattas, Bondilas, Rajputs, Pandarums, bairagis, gossains, and Musalmans smoke bhang.

24. The above-said classes eat or drink bhang all over Southern India.

25 and 26. Don't know.

27. The classes mentioned in 17 and 23. A wandering life appears to have led to the use of bhang. The impression is, the use of bhang neutralizes the bad effects of water of different places visited by the wandering people. Except the wandering pandarums, bairagis, and gossains. The forefathers of the other races, both Hindu and Muhammadan, mentioned in Answer 17, who formed the great bulk of the armies of the old dynasties, appear to have contracted the habit of using bhang, while marching from place to place in search of plunder or conquest, or while on garrison duty. Their descendants appear to have inherited the practice from them.

28. For a habitual moderate consumer $\frac{1}{2}$ to $\frac{1}{4}$ palam. For an excessive consumer $\frac{1}{2}$ to 1 palam per diem.

29. The most inveterate consumers are said to mix dhatura seeds (ground) or the roots of paddy plants to make them much intoxicated. Some of the bazar men sell bhang massala. The ingredients are poppy seeds, senna leaves, rose, sompu and kopra.

30. Mostly confined to adult males or youths. They use in company in Matams, or Choultries.

31. The habit of using bhang can, with some difficulty, be broken off by taking to drinking spirits or smoking or chewing tobacco,—a habit once formed will develop into excessive.

32. It is customary at the Holi festival among the Mahrattas to offer panakum made of bhang to the god Kama (Cupid), and drink it or distribute it among friends, boys and children. This may also lead the younger members to follow the practice of using bhang.

33. Respectable people avoid the company of the bhang eaters, as bhang eating is considered very disreputable socially in Southern India. The great majority of the population of Southern India abstain from eating bhang.

34. Yes, a sudden prohibition will cause serious discontent among the hemp drug consumers.

35. It would not be feasible to prohibit the drug altogether. It would lead to illicit consumption. The consumers will suffer from several kinds of diseases. An absolute prohibition will cause serious discontent, but it would not lead to any political danger, as the consumers are only an infinitesimal portion of the population in Southern India. It would be well to restrict the consumption of the hemp drug gradually by raising the price of the articles and making it dear.

36. I don't think alcohol has been substituted for these drugs now, as the former is more expensive than the latter.

37 and 38. I don't know.

39. I hear that smoking is more hurtful than eating or drinking these drugs. Smoking produces asthma.

40. Many native doctors prescribe purnathy to create appetite or strengthen the semen. I don't know whether it is used for cattle disease.

41. The moderate use of bhang appears to be beneficial in some cases.

Majum and purnathy are used.

(a) As a food digestive.

(b) It alleviates fatigue.

(c) Purnathy is also used as a preventive of disease in malarious tracts.

I refer to the moderate occasional use by people travelling in malarious tracts. The permanent residents of malarious tracts use opium.

42. When not used medicinally, even the moderate use of the hemp drug is hurtful to the constitution. It stupefies, dries up or impairs the constitution, produces idle and dirty habits, and asthma.

43. They are inoffensive generally.

44. It produces intoxication and allays hunger when smoked. If the consumer is deprived of his favourite drug, he feels the greatest uneasiness.

45. The use of these drugs, even in moderate quantities, produces ruinous effects, physically, mentally and morally. It impairs his constitution, produces asthma, stupefies or puts him out of his senses, and deprives him of all intellectual improvement and produces idle and dirty habits. It also causes loss of appetite.

46. In the case of habitual and excessive use of these drugs, the effects are appalling. It produces also temporary insanity. I will give one instance when answering Question 53.

47, 48, 49 and 50. Don't know.

51 and 52. I don't think these stupefied men commit any violent crime as far as Southern India is concerned.

53. A police constable, a Mahratta in the Kollegal taluk, Coimbatore district, was transferred to Martally or Nadukaval, a very unhealthy station on the borders of that jungle taluk. Having little or nothing to do there, the constable took to smoking or eating bhang to an immoderate extent; the result was that in a short

time he became a very violent insane, tried to break the iron bars of the sub-jail in which he was kept for safe keeping, became very abusive, and several times attempted to dash his brains by striking against the walls. When he was sent to Coimbatore Hospital, he became cured of it. I now hear that he now leads a quiet life as a cultivator as he was dismissed from the service when insane.

54. I don't think.

55. I don't think complete stupefaction can be induced without the admixture of dhatura. I don't think criminals stupefy their victims and steal their things as they do in Northern India. As caste is rigidly observed in Southern India, criminals have no opportunities of inducing caste travellers to partake of their sweetmeats and stupefy themselves.

56. I have given my reply to this question in answering Question 29.

57. I don't know.

58. I have not studied the rules promulgated for the present system of excise administration, but I hear the plant is indiscriminately cultivated.

59, 60, 61, 62 and 63. I think this indiscriminate cultivation must be checked. It must only be allowed to be cultivated in selected localities in each district or province, as poppy, and sold by licensed dealers at enhanced prices.

64, 65, 66 and 67. I don't know.

68. I hear licensed dealers only sell these drugs, but never heard that they prepare and sell the preparations themselves. I think it would be well to order these licensed dealers to prepare these drugs under proper control and sell in small quantities to the public.

60. Evidence of N. SOONDRAMIAH, Brahmin, Deputy Tahsildar, Ootacamund.

1. As Deputy Tahsildar of Ootacamund Division for over four and-a-half years, I have come in contact with several classes of people and visited all parts of the division.

3. My knowledge is confined only to the Ootacamund division, where, in some parts, the plant grows spontaneously to a very small extent. The whole area put together will hardly come to an acre.

4. The plant is generally called ganja plant.

5. The plant grows well in certain villages adjoining the slopes of hills on the northern side, such as Ebanad and Kadanad, and also in Musnigudi, especially near cattle kraals and in back-yards of houses where manure is abundant. It grows at an elevation below 6,000 feet. Solitary bushes are also to be found in Ooty town in certain back-yards.

6. There is no regular cultivation of hemp plant in this division. Only scattered bushes of a wild nature are to be found here and there; in some places solitary plants and in others a cluster of ten or fifteen plants.

7. There is no cultivation of hemp for any of these purposes; but I hear that the scattered plants found in Musnigudi near the houses of cattle graziers, sholagers, are used by them for smoking purposes.

8. As the raiyats are under the impression that its cultivation is prohibited, there is no regular cultivation.

69. The wishes of the people must be considered before opening a shop in a locality, otherwise the opening of a shop in a place where it is not wanted will cause the greatest annoyance to the people living in the neighbourhood.

Oral evidence.

Question 1.—I am pensioned Tahsildar.

Question 45.—I know people who take small quantities who suffer in this way. I know many who do not so suffer. It is a matter of temperament. It is the weak constitution people who suffer. Strong people can bear the drug. Bairagis are excessive smokers. Rajputs, Mahrattas, and others who remain stationary are, as a rule, moderate. Those who have work remain moderate smokers without becoming excessive consumers. It is the idle, those who have little to do, that go to excess. Many Bairagis suffer from asthma. They wander long distances and have no homes.

Question 53.—The constable referred to used to take the drug in small quantities, and when he went to this unhealthy place, he took the drug to excess. I was there as Tahsildar, so I know the case. The man did not drink. I saw him in his violent state. He was sent to Coimbatore Hospital and cured in a few months. I knew this man only as a policeman; he was my orderly several times. His two brothers were my peons; and he used to come to see them. No inquiry was made as to the cause of his insanity. He was merely sent to hospital, not the asylum. He was dismissed from the police owing to his insanity. I never saw his father. One of the brothers was a very sensible man; the other an ordinary peon. The dismissal was after the man was cured. I do not know the cause of dismissal definitely.

13. There is no restriction as to cultivation of this plant in this district. It can grow all over the place freely; but some say that ganja made out of the leaves of the plant found on these hills is not good.

14. Some of the ganja smokers on the hill slopes use either the green or dried leaves, according to urgency or necessity. There is no special preparation of any of these three kinds. Consumers purchase ganja from the licensed shop, which imports from low countries, such as Coimbatore, etc. (b) Charas, (c) bhang (except a beverage called bhang prepared from ganja) are unknown in this part of the division.

16. A sort of beverage called bhang, ramarasam or subja water, is prepared by some people in their houses by mixing powdered ganja with cow's milk or coconut juice, and also with sugar and spices.

18. Yes; if kept exposed to the weather for some long time, its flavour and ultimately its effect is lost. The drug is, therefore, secured either in earthen pots or tin boxes.

19. Charas is strange to this place and is not used at all. Ganja is used in the following preparations: Bhang—vide Question No. 16: Black and white majum.

Black majum.—This is a confection of the ganja leaves mixed with sugar and made into tablets.

White majum.—This is a confection of the ganja leaves mixed with sugar, ghee, and flavouring agents.

The former is used by adults and latter by children as a medicine.

Poornathilagiem is a different preparation from the last two, and contains more spices and drugs.

Except the first, the rest are manufactured in the ganja shop and sold by the shop keeper. Ganja is also used for other medical preparations.

20. All classes of people use ganja for smoking, but chiefly Bairagis, fakirs, and sholagers. It is said that those who are not given up to alcoholic liquors use ganja. There are not, however, many persons resident in this place who smoke ganja. Peons, etc., attached to Government offices, menial servants following European visitors, and different classes of persons coming to weekly market from low countries are the principal consumers besides the above three classes of persons.

21. Only two kinds of "flat and broken" ganja are sold in the local bazaar. Of these, the former is considered best; but both are equally used for smoking.

22. Charas is not known in these parts.

24. *Vide* No. 16. Very small number of the population of this division prepares these beverages. The consumers are some of the people living in the town.

25. Use of ganja is steady in this place.

28. (a) Three pies worth, or half a tola.

(b) Four tolas, or two annas worth.

29. Tobacco and dhatura are mixed as a variety, according to the practice of the consumers to produce stronger effect.

30. Ganja smoking is openly carried on by males in company generally. Ganja preparation is given to children as a medicine to check indigestion and diarrhoea.

31. Yes; it is very difficult to break off the practice when once acquired, and there is always a tendency to go to excess.

32. Some of the lower orders make use of ganja as an offering, like cocoanut, plantains, liquor, and such like articles, for certain deities, such as Maduraveeran, Muniapen, etc., according to the vow taken by each of such persons. This cannot be considered as essential, but is only a practice observed in very rare cases. Such practice is not followed by many people, and it is not injurious.

33. Ganja smoking or drinking is considered by many natives to be a vice, and the consumers are generally regarded by them with a sort of contempt. Generally people (except the consumers) do not appreciate or like the use of these drugs.

34. Persons who have long been in the habit of using ganja and to an excess could not be without it even for a day. If he is deprived of the drug, it would produce complicated diseases, and in his delirium he is apt to do any sort of mischief.

35. No; the prohibition of the use of any of these drugs would cause serious injury to many of the habitual consumers, and there would be much discontent among them, and there will be no apprehension of political danger. In case of prohi-

bition, there would either be illicit consumption, or it would be followed by recourse to other intoxicants, such as dhatura, opium, nux vomica, etc. Most of the consumers of ganja do not go in for alcoholic stimulants in the absence of the former. The prohibition could be enforced gradually by the introduction of penal enactments.

36. No.

38. Flat ganja is considered to be superior to other kinds, as it contains more flavour and stimulant. The result is that it produces more effect on the consumer.

39. Smoking is considered to be a milder form, and is no doubt less injurious.

40. Yes; to a large extent.

41. Many of the Bairagis and fakirs use ganja moderately to alleviate fatigue or to subside hunger, and the hill tribes of various tracts use it as a preventive of disease. I refer to moderate habitual use.

42. The use of ganja is considered harmless to the habitual consumers, but to others it cannot be considered so.

43. Yes; they are very quiet.

44. Intoxication is the immediate effect. Habitual consumers find it to be refreshing. It allays hunger and does not create appetite. The effect lasts for a day to a habitual consumer without any after-effect. The use of the drug produces bad effects in the case of a beginner.

45. However moderate the use of the drug may be, it has some bad effect in the long run. It is said to weaken the physical and mental powers. It does not injure digestion, but causes loss of appetite. It induces only laziness and not other vices. Some ascetics use it to give them concentration of thought.

47. It is not a hereditary habit, and it does not affect the children of the consumer.

49. It is not used at all for this purpose. Prostitutes never use it.

51. No; it has no connection whatever with crime in general or with crime of any special character.

53 and 54. No.

55. Sometimes it is practised on persons who are not consumers of the drug.

56. Dhatura and tobacco are sometimes used by excessive consumers to increase the intoxicating effect of ganja.

58. I think the system works well.

60. There is no cultivation of ganja in this division.

61. Charas is not produced or known in these parts.

63 and 64. No objection.

65. The taxation might be raised with the object of checking its free use.

66. One uniform rate of taxation is sufficient.

67 and 68. No.

69. Yes; local enquiry is made with regard to location and number of shops required.

61. *Evidence of R. SAMINATHA IYER, Brahmin, Acting Deputy Tahsildar, Coonoor.*

1. By conversation with men who have seen people using ganja.

2. There is no manufacture of ganja made in this division; consequently no information is available on the subject as derived from local knowledge.

3. Coonoor. It is not abundant anywhere in the division. It is scattered spontaneously. Grows in certain places.

4. The plant is known as ganja plant.

5. Wild ganja plants are seen to grow at a height of about 4,000 or 5,000 feet above sea level.

6. The wild plants in this division are scattered. No systematic plantation is going on. It is prohibited.

7. No.

14. No.

15. *Vide* reply to No. 19.

16. Yes; the ganja leaves from plants growing in these parts are seldom used by anybody. It is said that ganja can be prepared from the wild plants growing in these parts.

17. Muhammadans, Bairagis, and other class of people.

18. It is said that ganja and charas will last for years without deterioration if kept in closed vessel.

19. Ganja is used for smoking. It is also used with milk as a sort of drink; for consumption with sheep's brain and condiments in the shape of pills; in the form of cake containing mixture of it with sugar and jaggery.

20. Ganja is used by some Muhammadans, many of the Bairagi pilgrims from Hindustan, some of the other classes of people who have come from Bangalore and Mysore in Coonoor, and Wellington and other isolated places.

22. Charas is not used in these parts.

23. No.

24. Not known.

25. Use of ganja, bhang, etc., cannot be said to be on the increase here. In these hilly parts liquor is resorted to by many classes of the community for intoxication in preference to other means. The Badaga tribe and perhaps also the hill tribes use opium for intoxication. It has not come to notice that there is sale of large quantities of ganja going on.

26. (a) About one-half are habitual moderate consumers.

(b) About a quarter are excessive consumers.

(c) and (d) The remaining quarter may perhaps be distributed under (c) and (d).

It is said that nobody resorts to any of the above means of intoxication who has not previously been accustomed to it.

27. Fakirs and travellers and labourers generally resort to intoxication from ganja.

28. Small value of about 1 pie or less for each smoke.

29. (a) No ingredients are ordinarily used.

(b) Exceptionally. The following articles are used for preparing pills:—(1) Sheep's brain, (2) chillies, (3) onions, (4) other substances used for curry powder.

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For bhang—(1) Cow's milk or coconut milk, (2) poppy seeds, (3) cloves, (4) nutmeg.

30. Ganja smoking is practised in solitude or in company. Bhang is said to be consumed in company. They are said to be consumed generally by Muhammadans at the age of about forty years till the end of their lives. Females do not use them. Children do not use them.

31. Said to be easily formed and to be difficult for one to break off. It is said that there is a tendency to increase the number of occasions of use even in moderate consumers.

32. In smoking ganja a number of persons habituated to it sit together and smoke. So also is the case in the use of the mixture with milk.

33. Regarded not with favour. The mistake does not really give a man temporary vigour during the intoxication. The consumer, under the influence of the narcotic, looks giddy and awkward without proper sense, and the slightest contact of anything with his body causes him to jerk and shiver. It is not known in these parts whether there is any custom of worshipping the hemp plant.

34. Habitual smokers, if interrupted, do not digest food, and are said to suffer from disorder of stomach.

39. Smoking ganja is said to be worse in its effects than its use in other forms. It is said to weaken the lungs. The smokers of ganja are said to look emaciated. The consumers of the pills, milk mixture, and cakes are said to be sometimes very healthy and to take proper quantity of ordinary food.

40. For children generally the native doctors prescribe a sort of solid preparation mixed with ganja to regulate digestion.

41. Not highly beneficial to grown up persons.

42. There is harm, however moderate the use may be, in grown up persons. Besides engendering the vicious practice of its periodical consumption at stated intervals, if it is not consumed on these occasions the person will not be able to proceed with the ordinary work connected with his daily avocation. The use of these drugs, etc., is also said to moderate the hunger of sex. In this way also it is not good.

43. Yes.

44. *Vide* answer to Question No. 42. As soon as it is consumed the eyes grow round, the man loses his senses, has perhaps some inward sense of pleasure and relief. He becomes unfit for active service with reference to what surrounds him at the time. The use of pills and milk mixture is said not to affect digestion. Want of periodical gratification is said to produce great uneasiness.

45. Physically the moderate use of these drugs is said not to affect much the consumers thereof. Though they themselves do not become vicious, it is not favourable to the growth of morality in their family in the long run. I am not acquainted with any particular case.

51. No; the consumers of these drugs are generally not up to committing crimes, as people under the influence of liquor are.

54. Can be answered in the negative.

55. No.

62. *Evidence of R. C. RAMA IYENGOR, Brahmin, Village Magistrate, Berangy, Mudanapulee Taluk, Cuddapah District.*

1. As the village headman, I have obtained some information from the raiyats and others with whom I came in contact.

2. There are two kinds of this plant, *i.e.*, male and female. Female plant simply bears flowers, and is therefore rejected as useless in these parts. Male plant produces what is called kali, that is, gummy bunches of seeds and very small leaves. This kali is considered essential as containing narcotic substance. The name by which the useful and essential part of the plant is known is kali, which is prepared from male plant. This information I obtained from persons who raise the plant for preparing the said kali.

4. The plant is known by the name of bhang chettoo in Tellegu.

7. This plant is grown to a very limited extent in these parts, and is generally used for the purpose of smoking. It is grown in chilly gardens. It is not separately raised.

9. It is raised in chilly gardens to a limited extent, as stated above.

10. Agricultural cultivators also raise this plant.

13. Red soil is supposed to be quite suited for its growth. It should be well manured.

14. I beg to state that kali, referred to in my answer to Question No. 2, is obtained from the plant as follows, *i.e.*, when the male plant attains its maturity, the small branches containing kali are cut from the plant and tied in small bundles, which are placed beneath a heavy plank or a slab of stone for a few days. Then they are taken and dried in the sun and tied into large bundles.

15. This is smoked as follows:—A quantity of kali just sufficient for a dose is taken on hand, and all the gummy and leafy bunches are separated from the remaining useless parts. Seeds also are likewise removed. Then the leafy and gummy portion is saturated with water and again squeezed on the palm of the hand, so that the water may get out. This process is repeated twice or thrice

until the said substance is thoroughly cleaned. Then it is mixed with an equal quantity of tobacco and smoked.

17. Muhammadans, Mahrattas, Sugalias, as far as I am aware.

19. Kali, referred to in my answer to Question No. 2, is used for smoking.

20. The said kali is used for smoking by poor class of people and by those who lead a wandering life, and also by Bairagis and Sanyasis—a class of persons who profess to lead an ascetic life—and also by persons known by the name of Sugaly. In places where there is much cold.

30. I am told that even females use it. It is consumed in company as well as in solitude.

33. As far as I am aware, I beg to state that the use of the drug is not regarded by the people favourably. Those that use it are looked down upon.

40. I understand that native doctors use this in preparing some of their medicines.

41. (a) It is said to be digestive.

(b) It alleviates fatigue.

(c) It keeps off cold, etc.

43. I think they are inoffensive.

44. It is supposed to be refreshing. Produces some intoxication and creates appetite. When he cannot get the drug for use, he becomes uneasy and restless until he gets and thereby is gratified.

45. I am informed that the habitual use of the drug makes a man weak in his constitution and makes him timid and absent-minded.

54. I do not think they are used by criminals to fortify themselves to commit crimes, etc.

55. I am of opinion that it is not used by the criminals to induce their victims to partake any of these drugs and so stupefy themselves.

I beg to add that as the plant is raised in these parts to a very limited extent, my information is also very meagre.

63. *Evidence of K. NARAINASWAMY NAIDU, Velama, Huzoor Sheristadar, Masulipatam.*

1. Answers to questions on hemp prepared by Sheristadar.

2. The three names, siddhi or bhang, charas and ganja, are probably prevalent in the other presidencies, where the use of ganja is more common. Charas is not used here at all. A mixed article containing leaves and flowers goes by the name of bhang or ganja and is used by the people. So it is known here by that name, bhang or ganja meaning the same article.

3. In the three districts I know, *viz.*, Cuddapah, Kurnool, and Kistna, hemp plant does not grow spontaneously. But I have seen some stray plants growing on dung heaps in villages from seeds thrown out by the consumers.

4. It is also known by the names of haributi and gnanapatri, and they refer exactly to one and the same plant.

5 and 6. Not known.

7. There is cultivation to a small extent for production of ganja or bhang. There is no cultivation for production of charas or fibre or seed. In Bapatla taluk, in the village of Daggupadu about 100 acres, and in Pahiad and the zamindaris of Gudur and Challapelli small areas are cultivated, besides a few plants in the compounds of houses and mosques by the consumers.

8. No perceptible increase or decrease.

9. In this district no special methods of cultivation seem to have been adopted. It is cultivated like other dry crops of superior quality, such as tobacco or chillies. A rich black cotton soil or permanently improved soil is generally selected for the cultivation of this plant, which is occasionally raised as a garden crop in case of cessation of rain.

10. They are of the same class as other agriculturists.

11. Not in this district.

12. No.

13. It is not restricted to any particular district. It is commonly cultivated in the districts known to me. It requires no special conditions of climate, but requires rich soil, such as black-cotton or permanently improved land. I do not know if it requires any particular elevation above the sea. But it requires a good and seasonable rainfall, and in its absence irrigation. I do not think it will be successfully grown with less than 25 or 30 inches of rain properly distributed over the whole cultivated season. In no part of this district its cultivation is considered to be impossible.

14. A mixed article of ganja and bhang is prepared, but no charas. The locality and extent are given in my answer to Question 7.

15. No.

16. Bhang is prepared generally in their houses, and it can be prepared from the hemp plant wherever grown. There is no wild plant in this district.

17. No particular class. Preparation of hemp drug is made by Musalmans and Sudras among the Hindus.

18. Ganja or bhang does not deteriorate unless kept for a very long period. Its properties remain unaffected for a year or two. I believe it slowly deteriorates if kept after two years. I am not aware of any measures to be adopted.

19. Charas is not used here. Ganja is used for smoking as well as eating. It is also used for making majum. Majum is a paste made by mixing jaggery with ganja well powdered. Ganja is well ground and mixed with jaggery and taken in as a beverage. To this ginger and spices are sometimes added.

20. All Gossains, fakirs, wandering tribes of professional beggars among the Hindus, all idle men of whatever caste or creed who pretend to be religious devotees and their disciples. The consumers are very small, and the proportion may be 5 per mille of population. Even this may be considered as a liberal estimate.

21. Flat ganja is used in this district.

22. None.

23. In this district the preparation being a mixed one, it is used for smoking also.

24. Among the consumers of this article, two-thirds are smokers and one-third are eaters.

25. Neither increase nor decrease.

26. Habitual consumers only are found in this district. They are, as specified above, 5 per mille. Habitual excessive consumers are very few—perhaps a couple of hundreds for the whole district. Occasional consumers are not to be found here.

27. Answer to Question 20 answers this. Wandering tribes take it with the hope that it checks malarious poison. Others, viz, mendicants, etc., practise it with the expectation that it concentrates the mind.

28. Not more than $\frac{1}{4}$ of an anna for moderate consumers. Perhaps double that for intemperate habits.

29. Ordinarily no ingredients are mixed. Many smoke it unmixed with other things. But some mix tobacco to make it milder. For taking internally, it is ordinarily mixed with jaggery or sugar, milk and spices to give relish to the preparation. No dhatura is mixed. No bhang massala is prepared in this country.

30. Generally the consumption of these drugs is practised in solitude, except by Bairagis and

fakirs who do it in company. It is mainly confined to males. Females very seldom use it. Some peevish and puny children are given the preparation called majum to sharpen appetite and make them more buoyant.

31. The habit is easily formed, but is very hard to break it off. There is a tendency for the moderate habit to develop into the excessive.

32. No custom, social or religious, prevails here.

33. The consumption of this drug is generally regarded as degrading in ordinary society. It may be said that there is some public opinion in regard to its practice when religiously considered. Those that pretend to practise concentration of mind have a general idea that the use of the drug is essential. The narcotic is generally in bad repute, because the use of this, however moderate it may be in the beginning, leads to intemperate habits, and incapacitates the victim to attend to the ordinary requirements of life, and makes him go mad to some extent. There is no custom of worshipping the hemp plant.

34. I don't think it will be a serious privation to any class of consumers, seeing that the consumers do not confine to any particular class or creed. The probable number of consumers will be half per cent., as stated in my answer to Question 20.

35. It would be feasible to prohibit the use of this drug to a great extent. If this is done, there will be illicit consumption to some extent. Prohibition can be enforced by legal enactment, making the cultivation or possession of the hemp plant an offence. Certainly the prohibition would occasion serious discontent among some of the consumers. The discontent would not amount to a political danger under any circumstances whatever. Prohibition would be followed by recourse to (a) alcoholic stimulants, and (b) other drugs.

36. No.

37. Charas is not known here, nor is it used here.

38. Not known here. There is only one kind of ganja, flat ganja, and therefore there are no different preparations.

39. Smoking or eating within proper bounds is not at all injurious. Among the consumers of this drug great many are smokers, those that eat being very few. Smoking is therefore considered more injurious than eating, because more smokers of lazy or indolent habits are seen in this country. Smoking is carried on all the day, while the eating is done after the night meal, the effects of which are lost in the pools of slumber.

40. No; there are very few natives who know anything of cattle disease, and I have never met any physician that used ganja in the treatment of cattle disease. But some physicians use the drug in preparing medicines for human consumption in the case of bowel complaints, etc.

41. Moderate use of bhang or ganja gives (a) digestive powers; (b) alleviates fatigue; (c) acts as a preventive of disease in unhealthy tracts.

The classes of people that use the drug have been answered in Question 20. It is to the moderate habitual and occasional use I refer.

42. I consider that the use of this drug in very small doses is harmless. But habitual use, though beneficial in one way, is injurious either to reputation or to intellect.

43. Moderate consumers are inoffensive in this country.

44. Immediate effect is forgetting all worldly

cares. It is, I suppose, more intoxicating than refreshing. I don't think that it allays hunger. But it creates appetite by digesting food. The effect lasts from three to six hours. There are several after-effects, the chief of which is disinclination to hard work.

45. Habitual moderate use produces noxious effects, physical and mental. It does impair the constitution. Moderate use does not injure the digestion or cause loss of appetite. It does not cause dysentery, bronchitis, or asthma. It induces laziness, but it does not impair the moral sense; nor does it lead to habits of immorality or debauchery, except in rare cases. It does not deaden the intellect or produce insanity.

46. Excessive consumption of ganja strengthens digestive powers, alleviates fatigue, gives staying-power under exposure, and is a preventive of disease in malarious tracts. Excessive use is not, however, harmless, for it ruins a man in every way. Excessive consumers are not also offensive to their neighbours. Immediate effect of excessive use is instantaneous stupefaction and intoxication. Its effect lasts from six to eight hours. After-effects are lowness of spirits or depression of mind and indisposition to hard and honest work, laziness, and an attempt to satisfy the stomach in an easy manner, begging or pilfering. It produces noxious effects, physically, mentally, and morally. It impairs the constitution by weakening the chest and stomach or intestines, and thereby producing asthmatic symptoms. It deadens the intellect altogether and produces insanity. It leads to insanity, which may be cured by a gradual but thorough change of habits. The symptoms may be reinduced by the use of the drug. Typical symptoms are that the persons are always harmless and jovial. They have, as a rule, thin and emaciated constitution. I know instances of people of weak intellect having gone mad on account of the use of this drug; but I have not had any confessions made to me by them. Yes; I have considered the subject of persons suffering from mental anxiety or brain disease using the drug to obtain relief. In cases of mental anxiety or brain disease due to other causes than the use of the drug, a moderate use will afford relief; but the consequences of a habitual use are more serious. I am acquainted with some cases; but I am not able to enumerate them for want of a particular record of them.

47. I have no instances to show that the moderate use of the drug is a hereditary habit; but I believe with some families, such as wandering professional beggars, it has become hereditary. When the constitution of the consumers is affected, of course the physique of the offspring must be affected.

48. Except the tendencies mentioned in the above answer, I am not disposed to believe that excessive use is hereditary.

49. Moderate use is considered as an aphrodisiac. In this country it does not seem as if the prostitutes use this. The use for this purpose is no doubt more injurious, because it leads to habits of moral depravity, waste of money, and subsequent impotence.

50. Perhaps excessive use will not attain the object contemplated in Question 49, for excessive use stupefies the man and renders him useless.

51 and 52. I am not prepared to say that any proportion of bad characters are accustomed to this, or the use of the drug connected with any crime in general or in particular.

53. My experience does not permit me to answer this.

54. No; I don't know if criminals use the drug to fortify themselves to commit offences.

55. I have known a few cases in which criminals have administered these drugs to their victims before crimes were committed. Complete stupefaction cannot be induced by this drug without the admixture of dhatura.

56. No answer to the first part.

I know a case in which a traveller who had some property with him was administered bhang mixed with dhatura and sugar, which caused immediate stupefaction and thus facilitated the theft. The man recovered his senses after 24 hours.

57. None.

58. Present system, so far as it has been introduced, is working well. I do consider that it is still capable of improvement.

59. At present taxation and control have been imposed on the sale of the drug only. No control is exercised over cultivation and transportation. Nothing now prevents consumers getting the drug from the cultivators direct, or cultivating it in their own compounds and using it for themselves. If cultivation and possession are allowed only under check, the revenue may increase. But the consumers in this district being very small, special endeavours in this direction are not needed.

60. They are not at all controlled. The system requires modification. The cultivation of the plant should be allowed under license, and the crop harvested under supervision and the produce weighed and the duty levied. Then it may be allowed to be sold as freely as possible. The import of ganja should be prohibited save on payment of duty. In this case sale may be allowed free or on licenses on fixed fees.

61. No ebaras.

62. Yes; feasible. Cultivation without license may be notified as an offence. Licenses may be granted by Tahsildars or Salt Inspectors. Cultivators may be made to keep a record of the plants sown in the licensed area, where a blackboard indicating that it is a licensed area should be hung up. Periodical inspection should be made, and the plants counted to tally with the registers maintained by the cultivator. The crop, when it is mature, must be watched and harvested under the supervision of a Revenue or Abkari officer, and when it is ready for market, it may be weighed and fixed duty levied. If no duty could be paid by the cultivator, it must be stored and preserved under lock and key of Abkari or Revenue officer, and occasional deliveries being made on payment of the said duty.

63. So long as the present system of controlling the sale is carried out, and not that of controlling the cultivation and possession, there are no objections. If cultivation, transportation and possession are restricted, sale of the drug on license with fixed fees may be introduced. At present the drug is sold in shops selected and appraised for sale. The whole quantity consumed by the consumers does not probably pass through these shops; hence modification.

64. Yes; for reasons given above.

65. There is only one article here in this district, and does not allow any comparison with the other drugs. The consumers of this article are very few, and therefore no comparison is possible.

between revenue on this and the revenue on other intoxicating drugs.

66. No.

67. My objections have been given above.

68. There are no shops for consumption.

69. The demand being very little, as evidenced by the small number of shops in existence, the wishes of the people have not been consulted. But District Officers and Tahsildars have been originally consulted as to the places where the drug is mostly wanted and the necessary shops advertised for sale. Those shops where there have been no

demand have been closed and the remaining ones continued. As the demand is very little and the consumers are low caste people, it is not considered necessary to consult their wishes.

70. Importation from Native States is not prohibited, nor are cultivation and possession restricted. It is not possible to give any facts restricting the use of ganja duty on which has not been paid. On the other hand, there is at present room, as explained in answer to Question 63, to show that all the article consumed by the people is not obtained from the sanctioned shops.

64. Evidence of P. LAKSHMINARAYANA, *Brahmin, Manager of Court of Wards' Estate, Nuzvid.*

1. One day about half a year ago a man travelling in boat was found intoxicated having been given by a friend of his as a joke ganja mixed in jaggery. At times I used to see Bairagis using this drug. I used to make enquiries about the use and effects of this plant. I have made some enquiries to secure some more information from Musalmans and Bondilics in Nuzvid who often use this drug.

3. The hemp plant, so far as I understand, does not grow spontaneously. I learn that it does not grow unless special care is taken, just as in the case of vegetables, tobacco, etc. It requires irrigation.

14. (a) Ganja is prepared in this part of the country moderately. It is abundant in Bellary, Cuddapah, Rayavellore and Hyderabad. In Kabul and Kandahar also this is grown very abundantly. In Nuzvid and Ellore the hemp plants are grown in back-yards and ganja prepared.

(b) Charas. This is not in use in this part of the country. This is I learn charrs and not charas. The word charas also is in use, but it is the mixture prepared from opium and ashes of betel leaves or leaves of *Acacia arabica* plant and made into pills. These are called maddat charas, but the one in question is found to charrs which is not made in this country, but in places where the dew is very much. It is the sediment deposited on the ears of hemp plants (like on tobacco plants) removed by persons covered with leather shirts and coats by moving through plants by which process the sediment comes out along with their coverings and it is taken out and placed in a cup when it becomes congealed like wax. It is cut into pieces like rubber pieces. This is found very valuable and cannot be had by ordinary people. This product is mostly prepared in Kabul and Kandahar.

(c) Bhang is also prepared and used in this part of the country just like ganja, but in a less quantity than ganja.

16. Bhang is prepared generally by people in their houses. It is made with hemp plant grown by people, but not with that grown spontaneously. Ganja and charas also cannot be prepared with the hemp plant grown spontaneously. These are all made with plants grown with special care. If there be plants spontaneously grown anywhere, they may be used for ganja and bhang, but not certainly for charas.

19. No. Ganja and charas are used for drinking in the following manner:—Ganja is pounded and put in water mixed with jaggery. To this

mixture milk and cream and powder of almonds and nutmegs are added. This preparation is drunk. This is also used for eating when mixed with sweetmeats and cakes; charas also is used for drinking by a similar preparation. These are mixed in medicines. Ganja is also used mixed with some other articles and eaten by people if they choose to become intoxicated and remain giddy. This is also given to animals, milch cows and buffaloes when they do not allow people to draw milk and do not let their calves go to them for sucking milk in view to get them intoxicated and gradually to get accustomed to practice. This is also used for stray elephants when they are to be caught and tamed and when they become unwieldy. This is used for intoxicating them and thereby to reduce their ferocity. The uses above explained are prevalent in this part of the country, say Hyderabad, Ellore, Kondapally, besides Cuddapah, Kurnool, Bellary, Rayavellore.

20. Ganja is used for smoking by the rich and the poor but charas by the rich alone, it being a very valuable article. All the Bairagis use ganja invariably in the way of smoking. Charas is used for smoking by very rich people, such as Nawabs, Amirs, etc., amongst Musalmans alone. Ganja is used almost everywhere, while charas in places like Hyderabad, Kabul, etc.

24. Bhang is used by many people like ganja, but in a less number. One who takes ganja may or may not be accustomed to use bhang. Bhang is not eaten but drunk. This is used amongst Musalmans and Sudras. This is done in this part of the country.

25. The use of ganja and bhang is on the increase, as this is mostly used by men of lower classes who are now-a-days earning much money on account of increase of labour they turn out, the wages paid to them being far higher than before. The use of charas can be said to be on the decrease, as many of the rich people are being reduced in their circumstances, the market being high and the labour being dear.

28. The average allowance of ganja (to a habitual moderate consumer) is about two tolas per day, and it costs one anna or so. Bhang also is used in a similar quantity, but at a double cost owing to mixture of articles of some value. Charas is used at not less than $\frac{1}{16}$ of a tola, and it may cost not less than one rupee.

32. There is no social custom in respect of consumption of any of these drugs in this part of country, but in Kathiawar it is a custom amongst respectable families to give opium water to all

guests; so also it is supposed that there might be such a custom of giving out bhang or ganja to guests in Cuddapah, Kurnool, Bellary, and Hyderabad. Amongst bairagis and others who are accustomed to use these drugs will as a custom give the same to their friends accustomed to them. As regards religious custom, bairagis chiefly use these drugs as it would tend to keep up their religious enthusiasm.

33. The consumption of these drugs is considered a bad habit by one and all, and irreligious by the first three classes of Hindus. The public opinion about this is against the use of these drugs, as their use is prohibited amongst the said three classes; but the prohibition is not so seriously observed as there is no excommunication from caste on this particular ground. The use of any form of the narcotic is generally in disrepute, and it is attributable to its intoxicating nature, as it makes a man lose his temper if it be a little excessive. It is taken although it produces disrepute as it gives some excitement if taken moderately. None, I hear, worship hemp plants on any occasion.

39. Smoking is not less injurious than drinking or eating the same; one accustomed to smoking loses blood in the body and becomes a skeleton and at last falls a victim to it. Some say it is less injurious as its power is weakened by the fire, but it does not appear to be so; one who smokes loses his courage and grows timid and fearful of any attack from a foe. Drinking and eating ganja gives a man strength in body and befits him for any hard exercise, but they produce bad results if one remains idle after drinking.

40. The use of ganja is prescribed on account of its medicinal qualities. It is used in native medicines such as Lokanadharasam and choleraic medicine. They are prepared with the juice of hemp plants. It works on patients suffering from swelling diseases and asthma. Ganja is used in the treatment of cattle diseases such as Chaidomma.

41. The moderate use is beneficial to some extent. It causes proper digestion and keeps a man off ordinary sickness. It gives some strength. Smoking ganja prevents any change coming over the system of a man by frequent change of climate and water used for drinking. Drinking and eating ganja gives strength temporarily for bearing any bodily strain in taking physical exercises.

42. If in any case it is not proved beneficial, it can be said to be harmless for the reason explained under question 41.

43. They are mostly inoffensive. They always lead the life of hermits.

44. It gives refreshment. It allays hunger for a short time. It does produce intoxication and creates appetite a few moments after. The effect will last for an hour or so. There will be no after-effects. The want of subsequent gratification does produce a little uneasiness.

45. No. It does not produce physical, moral or noxious effects. The cases of bairagis (wandering Hindus) or fakirs can be taken for instance.

49. Yes. This is mixed in some other medicines for using as an aphrodisiac.

51. No. This has no connection with crime of any character. By using this the man does not become a bad character tending to do any violent actions.

53. Excessive indulgence does not incite to unpremeditated violent crimes, as it would not keep a man in very active condition with bad temper.

54. These drugs are not used by criminals to fortify themselves to commit any act of violence or other crime.

55. Criminals induce their victims to take these drugs in view to stupefy them. If it is given to a person who is not accustomed to it, and if given in an excess quantity to one accustomed to it, it will cause stupefaction. Complete stupefaction can be induced by this drug alone without admixture.

65. *Evidence of COLONEL G. CHRYSTIE, Deputy Inspector General of Police, Central Range, Vellore.*

51. The lowest class of Muhammadans, among whom there are a good many bad characters, consume ganja and bhang prepared from it. Korchers or Yerikallas and Lambadies or Sugallies are said also to consume it largely. These tribes often commit crime. The use of the drug tends ordinarily to make the consumers lazy, supine, and averse to regular work, and in this way probably conduces to offences against property. On the other hand, as it appears to enervate and unman its partakers, such criminals would be the reverse of enterprising, daring and skilful. It is to be remarked, however, that the Lambadies, who use it regularly, are of superior physique and bolder than the ordinary population. An old and intelligent pensioned Police Inspector of great experience suggests that this is owing to the use of ganja being hereditary with them. This may be so, or it may be that they use it only moderately, and that the sottish creature who represents the ordinary recognised specimen of a bhang-eater is an immoderate consumer. I have been called on to make an early report, and I have not sufficient information to enable me to distinguish between moderate and immoderate use of the drug.

52. See 51.

53. The only instance I can recall of ganja exciting to crime is the following. On the 1st December 1890, at Anantapur, a peon of the Head Assistant Collector, named Shaik Hussain, a well-known bhang smoker, having been fined four annas for some breach of duty, got into a high state of irritation and went and smoked bhang in a mukkan in Anantapur, at noon. The bhang appears to have excited him to madness; he ran by the Anantapur-Bellary road with a heavy stick in hand, struck with it a shepherd boy, who was grazing sheep just outside the town as he went on, then attacked an old man named Dadi Sahib of Narpala village, who was going by the same road, struck and felled him with the stick, then beat out his brains and murdered him, and ran along the same road striking and threatening the persons whom he met. He was arrested by reserve constables, who were sent at once in search of him the same afternoon, at a distance of four miles from Anantapur. The murder was committed on the public road within two furlongs from the Collector's compound. The peon was tried for the murder of this old man, who was previously unknown to him, convicted and sentenced on 4th February 1891 by the Sessions Court to transportation for life, but subsequently

the sentence was commuted to one of rigorous imprisonment for 10 years by the Government. The drug the peon was addicted to was ganja, and this was the only occasion on which he was known to have broken out into the fit of madness. The Sessions Court judgment is submitted herewith.

54. Lambadis are said to fortify themselves with ganja before committing dacoities.

55. I have never heard criminals inducing their victims to partake of hemp drugs to further their designs. The use of dbatura for this purpose is of course well known. I am not aware whether hemp drugs produce complete stupefaction without admixture.

*Appendix to COLONEL CHRYSTIE'S
evidence.*
IN THE COURT OF SESSION OF THE BELLARY
DIVISION.

The 4th day of February 1891.
SESSION CASE NO. 7 OF 1891.

*Preliminary Enquiry No. 1 of 1890, on the file of the
Sheristadar and 2nd Class Magistrate of Anantapur.*

No.	Name of accused.	Father's name.	Caste or Race.	Occupation.	Residence.	Age.
1	Shaik Hussain.	Fakhrud- din.	Maho- medan.	Dala- yet.	Penu- konda.	30

	<i>Date of</i>	<i>Judgment.</i>
1 Occurrence	1 12 90	Queen Empress of India
2 Complaint	1 12 90	<i>versus</i>
3 Arrest or appearance	2 12 90	Shaik Hussain.
4 Commencement of trial	4 2 91	Offence . Murder under section 302, I.P.C.
5 Close of trial	4 2 91	Plea . not guilty.
6 Explanation of delay		Opinion of assessors guilty. Finding of Court . guilty. Sentence . transportation for life.

The facts of this case are hardly in dispute. Shaik Hussain's plea is that he beat out the brains of a pig and not of a man. The evidence of Irisha Ali and his own statement show that he on the morning of the 1st December, about noon, was smoking bhang in a makan in Anantapur. That he lost his temper after smoking it, and spit at and abused some children who were playing there. Irisha Ali left him there.

2. About one o'clock Sadruddin, Shamsuddin, Honnur Sahib and Fakeerugadu (1st, 2nd, 3rd, and 4th prosecution witnesses), who were working on the new railway where it crosses the road to Bellary, saw him beat an old man, proved to be Dade Sahib, to death with a heavy stick, and pass along the road towards Bellary. The first two witnesses saw him coming along the road behind the old man, fell him with the first blow and then beat out his brains. They were afraid to interfere. They are three of them little more than boys in strength, and the fourth is an old man. As soon as he passed on they sent word to the Police.

3. He was followed by five constables, and secured after a struggle, evidently in a state of violent madness, from which he appears to have been still suffering when brought to the hospital. The medical evidence shows that he was suffering apparently from some intoxicant, and that he did not altogether move for some days.

4. His defence is that he beat out the brains of a black pig, and not of a man. The evidence is conclusive that he did beat out the brains of Dade Sahib.

5. It is certain that he did it while in a state of madness brought on by smoking bhang. This is no defence to a criminal charge, and he must therefore be convicted of murder.

6. He has been employed as a dalayet in the Head Assistant Collector's Office, and may be presumed to have been a respectable inoffensive man until now. I think that I may justly distinguish a murder committed in these circumstances from a murder committed with deliberation, and with real intention, and need not pass a sentence of death.

7. The Court concurring with the Assessors finds that Shaik Hussain is guilty of murder punishable under section 302, I. P. C., and sentences him to be transported for life.

IN THE HIGH COURT OF JUDICATURE AT
MADRAS.

THURSDAY, THE SIXTEENTH DAY OF JULY ONE
THOUSAND EIGHT HUNDRED AND NINETY-ONE.

Present :

The Honorable T. MUTHUSAMI AIYAR, C. I. E.,
Officiating Chief Justice,
and
The Honorable MR. JUSTICE SHEPHARD.

CRIMINAL APPEAL NO. 70 OF 1891.

SHAIK HUSSAIN *Appellant*
(Prisoner).

Appcal against the sentence of the Court of Session of the Bellary Division in Case No. 7 of the calendar for 1891.

This appeal coming on for final disposal after the receipt of further evidence called for in the order of this Court, dated 22nd April 1891, and counsel not appearing on behalf of the appellant. Upon perusing the petition of appeal and the record of the evidence and proceedings before the Court of Session, and upon hearing the arguments of the Government Pleader and Public Prosecutor in support of the conviction, the Court delivered the following—

Judgment.—The evidence of the District Surgeon which has now been taken shows clearly that the abnormal state of mind of the prisoner was merely the temporary effect of the intoxicant which he had taken and could not properly be traced to any mental disease. This being so, we have under sections 85 and 86 of the Indian Penal Code no alternative but to dismiss the appeal and confirm the sentence of the Sessions Judge. Having regard to the fact that the prisoner did not know what he was doing, we think the papers ought to be sent to Government in order that His Excellency in Council may commute or reduce the sentence if he thinks fit to do so.

(A true copy.)
(Sd.) H. W. FOSTER,
Registrar,
Appellate Side.
(True copy).
R. C. C. CARR,
Under Secretary to Government.

Proceedings of the Madras Government.
Judicial Department.

Read again G. O. No. ¹⁶¹¹₁₆₋₈₋₉₁ Judicial.

Read also the following letter from the Registrar

of the High Court of Judicature, Appellate Side, Madras, dated 25th August 1891, No. 1057 (Judicial):—

In reply to G. O. dated 15th instant, No. 1611, I am directed to state that in the opinion of the Judges who composed the Bench by which Criminal Appeal No. 70 of 1891 was decided, a sentence of ten years' rigorous imprisonment would be an appropriate sentence to substitute for the sentence of transportation for life passed upon the prisoner Shaik Hussain in Bellary Sessions Case No. 7 of 1891 and confirmed in the above appeal.

*Order thereon dated 12th September 1891,
No. 1859 (Judicial).*

In exercise of the power vested in him by section 55 of the Indian Penal Code, His Excellency

the Governor in Council is pleased to commute the sentence* of transportation for life passed upon Shaik Hussain by the Bellary Sessions Judge in Cal. Case No. 7 of 1891 to one of rigorous imprisonment for 10 years.

(True extract.)

(Sd.) J. F. PRICE,

Chief Secretary to Government.

To

The Inspector General of Jails.

(True copy.)

R. C. C. CARR,

Under Secretary to Government.

* Sentence confirmed by High Court in Criminal Appeal No. 70 of 1891.

66. Evidence of MR. F. T. BAGSHAWE, Superintendent of Police, Trichinopoly.

51. Less than 10 per cent. of the bad characters in large towns are consumers of opium, and in the south of India away from towns it is not indulged in by them. I have not found that grave crimes have had any connection with the use of opium, but in regard to larcenies it may induce occasionally to their commission, as the confirmed opium eater or smoker will do anything to enable him to purchase his precious drug, just as the gambler or drunkard is so tempted.

52. In the only cases of excessive use of opium which have come under my notice, it has not been conducive to crime. The opium eaters have simply become sodden and emaciated, and so passed out of existence.

53. I have known of no cases in which these drugs have incited to unpremeditated crime, violence or otherwise, nor has any case of temporary homicidal frenzy come under my notice.

54. The drug is not used by criminals to fortify themselves for the committal of crime. For such fortifying they have recourse to spirits, such as toddy, arrack and the extract of the mohur flower.

55. No cases have come under my notice of criminals drugging their victims by opium in order to stupefy them and then rob; but cases of dhatura poisoning for such purposes have so come. I cannot answer as to complete stupefaction being induced solely by opium.

67. Evidence of MR. S. D. SIMPSON, Deputy Commissioner of Police, Madras.

51. Although I have had many years' experience and have seen ganja (Indian hemp) consumed in many forms, yet I am unable to answer all these questions to my mind satisfactorily, for Indian hemp does not affect all persons alike, and does not always produce the same effect. It all depends in what mood the consumer is in at the time he partakes of the drug. It generally produces intoxication, and has a varied effect. One day the consumer may be happy and contented; another day he may be in a boiling rage; and the third day he may be heavy and sleepy, and suffer from mental weakness disqualifying him for any labour. The flowering tops of the ganja plant is usually smoked, but majum (a confection of ganja) and bhang (sabzi), preparations of the same, are taken inwardly (into the stomach). No. The moderate use of hemp drugs has no connection with crime in general, or with crime of any special character.

52. Few bad characters are excessive consumers of these drugs. An excessive consumer is usually a wretched creature, who has been rendered unfit for any action requiring judgment, vigour, or manliness.

53. No. Certainly not crime without violence. Excessive indulgence, as I said before, usually subdues the action of the brain and reduces the subject to a state of disablement, till sometimes his prolonged and excessive indulgences soften his brain, when he either becomes an imbecile or

hypochondriac, a monomaniac or a raving madman and commits crime with violence.

Yes; I have known cases, and can give specific instances if required, but they are very few.

54. This is a difficult question to answer. Ganja never has the same effect as brandy and whiskey, and therefore it cannot be said that when a criminal is arrested under the influence of ganja or bhang immediately after he has committed an offence, that he took it to fortify himself to commit a premeditated crime. A criminal may go to a ganjakhana with the intention of smoking and fortifying himself to commit a premeditated act of violence. When he has taken a few whiffs, he becomes merry and contented, and forgets all about his intentions. Spirituous drinks are generally resorted to for crime with and without violence by criminals of all classes.

55. I know no instances of the kind. Both ganja and bhang in themselves will produce complete stupefaction if a sufficient quantity is consumed. No admixture is necessary. The insensibility will last for hours, the subject being quite unconscious to everything around him. The preparations of Indian hemp is largely used medicinally. The electuary commonly known as majum is prepared as a hulwa, and used to be sold in sweetmeat bazars and in the shops of native druggists and herbalists, but since the introduction of the Abkari Act, such preparations are vended in licensed places of business. This hulwa is administered to children

suffering from diarrhoea, and is also given to them to procure sleep and to keep them quiet at night.

Oral evidence.

Question 1.—I have been Deputy Commissioner of Police, Madras, since 1883. I have been Inspector since 1865, and in Madras almost continuously since 1867.

Question 53.—I have three cases in my mind; they are instances of violent crime. One was a native officer in Bangalore about 1886. He shot his subadar-major at 8 P.M., locked himself up in his house all night, and next day at 2 P.M. shot his wife, opened the door, allowed his mother-in-law and his children to escape, and then sat down in his chair and shot himself. It was a case of jealousy in respect to the officer shot. It was associated by me with ganja, because it was said that he was a ganja smoker. Clearly he had the motive before; and I think this cannot be regarded as unpremeditated crime. It is the tendency where a man is a smoker to attribute such a case to the drug. On the contrary, I have known cases of men who have threatened murder or suicide, and then had a smoke and passed away from their anger altogether. In this particular case I cannot tell whether any evidence was produced of ganja having been used at the time.

The second case was about 1883 or 1884. A barber in Madras City was twice married, and on the day he had to receive his second wife he cut the throat of the first wife and soon after cut his own throat. I enquired into the case. He was removed by me to hospital. He recovered. As soon as he was able to speak, he said he was under the influence of ganja, and could not tell what he was doing. He was tried at the High Court here. He was transported for life. He was a drinker. He preferred his first wife and hated the second. He had been married to the latter as a child, and then she had gone to Burma. He had to take her, though he had meanwhile married the wife I have called "the first wife." He murdered her and attempted his own life, because he loved her and hated the other. He may have done this from drink or from the smoking. His object was that they might both die and she might not (as he said to the Judge) be with "the second devil," but with the angels. Such murders occur apart from any intoxicant. I cannot say that I can make up my mind as to whether ganja had anything to do with this case or not.

In a mantavam (canopy) in the city there lived some street waifs ("someris"). One of them happened to be a ganja smoker. He took a big stone one night, and, knowing that a woman was sleeping at the other side of the parda, he dropped it on her head and killed her. Apparently recovering soon after from what was supposed to be ganja intoxication he cut his own throat. He was taken to hospital. When he recovered he said he had not the slightest recollection of having killed the woman, but had attempted to make away with himself on being told what he had done when he recovered from the ganja. There was no motive whatever. I do not profess to understand how this occurred. It seems to have been a pure case of mischief. He was a young-

ster, and the woman an old beggar woman. He was convicted and got (I think) two years for a rash act. He had thrown the stone over the parda, and it had killed the woman. It was about twenty pounds weight. He said he had had his usual whiff, and had no notion of throwing the stone. There was no passion. The people who were present gave information saying that the lad had thrown the stone in play at about 8 P.M. He ran off, and was found that night with his throat cut.

I have cases that I could give you of even worse character in connection with alcohol. But I have confined myself to the cases I knew connected with hemp drugs. The above are the only three cases I know thus connected by report with these drugs. But, as I have already said, when it is known that a criminal is a ganja smoker, the tendency is at once to connect his crime with ganja without inquiring whether he had a whiff that day or not. The reason of this is partly because the drug is in disrepute, and this is due to the fact that it is cheap and used mainly by the poor.

Question 45.—I cannot say that a large number of consumers have passed through my hands as criminal. But I have come in contact with many in other ways, specially street waifs, travellers, and bairagis. I have observed in excessive consumers that they eventually become emaciated and weak-minded, though harmless creatures, who can just pass to and from the ganja shop. There is, perhaps, one in ten thousand or fifteen thousand in the city who is an excessive consumer, or about one in five hundred of those who go to the shop; and his state may be due to some loathsome disease or some misfortune. The same is the case with excessive opium smokers. The moderate ganja smokers are hale and hearty. There are no physical effects on them. I think you can distinguish an excessive consumer of alcohol from the excessive consumer of opium or ganja; but you cannot distinguish between the two last, except perhaps that the chest may be more hollow in the case of the excessive consumer of ganja. I should say that even an expert could not tell the ganja smoker (in excess) from the opium smoker without evidence as to habit. There is nothing peculiar in the eye. There is heaviness of the eye in the case of excessive consumers of ganja and opium. No redness except in case of exposure to the sun. The opium eater's eye is heavier than the ganja man—heavier eye-lids. The general appearance of the ganja smoker would be no guide; but the mark or corn on his hands from rubbing ganja would be a guide. These corns are not formed with tobacco. The moderate use of ganja makes no impression whatever on the appearance. I can produce men who have smoked for years and are in perfect health.

We would not enlist ganja smokers in the police, because we enlist boys. We enlist lads of eighteen. If such a lad took liquor, I would not take him; nor would I take such a lad if he took ganja. But there are men in the force who have long taken ganja or bhang without being absent from duty or incurring censure. The moderate use does not lead to breach of discipline, and it is not regarded as an offence at all.

68. *Evidence of Mr. H. G. PRENDERGAST, District Superintendent of Police, Kistna.*

51. There is in this district a considerable proportion of bad characters who are habitual moderate consumers of ganja. But I believe the connection is accidental. It happens that this district is specially subject to the inroads of houseless nomads, such as Yanadis, Yerukalas, Lambadis, and Wodders. Owing to exposure in the malarious tracts they haunt, these are very liable to attacks of fever and rheumatism, and thus take to ganja smoking, which they believe to be prophylactic in such cases. Other criminals also are often ganja smokers; but I do not know of any instances of criminals who were habitual consumers of hemp drugs before taking to crime. In these cases it is generally a glorying in vice for its own sake that seems to induce the habit. It may, however, be possible that a wish to increase their powers of endurance is the object with them as well as with the nomads.

I return to this subject in my reply to question 54.

52. Bhang is seldom used in this district. Those who do indulge in it are descendants of Rajputs, Bondelis, and other immigrants from the north. Majum, a confection, one of the ingredients of which is ganja leaves, is used as a soporific, mostly for children and invalids, and as an aphrodisiac. Its latter use and the habit of ganja smoking often end in excessive use. But this, so far as I know, does not produce any effect on habitual crime.

53. The excessive indulgence in majum and ganja smoking incite to unpremeditated crime, such as indecent assaults, homicide, and arson. I know of instances in which all these crimes have been attempted by persons suffering from the frenzy induced by excessive indulgence in ganja smoking and majum eating.

54. Most of the dacoity committed in this district is the work of the nomads mentioned in my answer to question 51. As many of them are found to be under the influence of ganja when committing the most cruel dacoities, and there is no reason to think that they are ignorant of the reputation ganja has of increasing powers of endurance and lending Dutch courage, we have every reason to suppose that they do fortify themselves with these objects before undertaking specially dangerous and arduous crimes.

55. Majum is often used by criminals to stupefy their victims, and complete stupefaction can be induced by majum without further admixture. I know of one instance of a boy being induced to smoke ganja as an aphrodisiac, and rendered so incapable as to allow of his ornaments being removed by his tempters without protest from him. The boy, however, said he was not so stupefied as not to be aware of the removal. He afterwards slept for a long while. Ganja leaves are smoked mixed with tobacco.

Oral evidence.

Question 1.—I have been 24½ years in the police, and my whole service has been spent in the Northern Sircars.

Question 20.—The use of ganja in the Northern Sircars is not extensive. I have made enquiries, and find that 1 in 1,000 of the total population

in towns and 1 in 10,000 in the rural tracts consume the drug. These figures represent an average for the whole of the Northern Sircars. The drug is more used in the Kistna district and the Agency tracts than in other parts. Opium is very largely consumed in the Agency tracts, and the same people are not likely to consume opium as well as hemp. In these tracts the respectable people take opium and the disreputable classes ganja. As a rule those who live by labour do not use ganja. In the Northern Sircars generally ganja is consumed by poor people who are also respectable, as well as by some rajas and respectable Muhammadans, and sepoys and military pensioners.

Question 53.—I remember two cases of arson, the offender in one of which had previously been guilty of several indecent assaults. Several cases of indecent assault were also committed by the Babajis of a Math in Rajamandri. There was a case of attempted homicide in the Vizagapatam district, and one in the Kistna district of actual homicide. These are the cases referred to in my written answers. They all came into court. I should think the records of the cases would contain reference to the use of ganja. All the cases were acquitted on the ground of insanity, and the offenders went to the lunatic asylum. In one case of arson only the offender, who had become sane before the trial began, was acquitted. He was found to have committed the offence in a fit of insanity. This man was not sent to the asylum, as the District Surgeon certified he was no longer a dangerous lunatic. In saying that the men were in a state of frenzy I mean that they were actually insane. I associate these cases with ganja because the men were known ganja smokers, and, as well as I could ascertain, none of them showed any symptoms of being insane before he took to ganja. Some of them had been insane for a year and other considerable periods. They had been smoking for several years. The case of arson in which the man was discharged occurred in Rajamandri in 1870 or 1871. The records of that case must have been destroyed.

Question 54.—The effects of ganja when used as a fortification for commission of crime last longer than those of alcohol, and the drug is not so likely to disable a man by intoxication as alcohol is. I should gather that a criminal had not used alcohol from the absence of the smell of liquor. I could not say that a man dosed with ganja could be detected by the smell, because the ganja smoker has no distinctive smell. The inference that the men of whom I speak were under the influence of ganja was drawn from the fact that they were intoxicated, i.e., elevated, and did not smell of liquor. It was also apparent that they were not consumers of opium, because that would have been detected by the look of their eyes. In my experience opium does not incite to violence. Further, the persons in question when arrested were found to be habitual ganja smokers. If they had been habitual liquor drinkers, I should not necessarily have expected that they would have used liquor to fortify themselves, because, being associated with ganja smokers, they might have thought ganja would serve the purpose better. I have never seen a man using ganja for the first time. The result in such cases as I have heard of has been that the man has been stupefied. But in those cases the drug was administered

with a view to stupefaction. Ordinarily a liquor drinker would fortify himself with liquor. On the contrary a ganja smoker would certainly not take alcohol to fortify himself. In this answer I do not attribute the crime to the ganja habit. We have a great many ganja smokers who are criminals, but that is purely an accident. In the register which is kept of bad characters the ganja

liquor or opium habit is noted. I am speaking of the district in which I am now serving. I think, however, that the fact is generally noted. The reason for noting it is that the man's sources of livelihood and expenditure are recorded as far as possible. No use would be made in court of this information.

69. *Evidence of RAI BAHADUR K. NARAINASWAMY, Telaga, Inspector of Police, Vizianagram.*

1. In the discharge of my duties as a police officer, I have often had opportunities to come in contact with the habitual consumers of the various products of the hemp plant. From my personal knowledge of such men, and also from the information given by them, I make my answers to the following questions.

14. Yes, ganja and bhang are prepared in this country. Mostly in the agency tracts, and to a small extent on the plains.

16. Bhang is prepared generally by the people in their houses. It can be prepared from the hemp plant wherever grown. Ganja can be prepared from the wild plant wherever grown.

19. Ganja is used for smoking in confection, called madum and in electuaries. Madum is prepared by the admixture of sugar and jaggery, ganja, and some spices. Some make ganja into powder after roasting it in ghee and use the powder in electuaries, while others use the very ghee in which the ganja is boiled after the latter is strained away. Some use the strained ghee by applying it to betel leaves. This is done to produce sound sleep or liveliness. These uses are prevalent in towns.

20. There are ganja smokers among all classes of people, except banians. Bairagis (mendicants), as a rule, are all ganja smokers. Of others, some of those that frequent the hilly parts of the district are also ganja smokers. About 10 per cent. of the population of Vizianagram are either ganja smokers or bhang eaters or drinkers. These uses are more prevalent in towns than in villages.

24. Brahmins and Musalmans eat or drink bhang. The drinkers outnumber the eaters. In towns.

25. From April to September 1893, ganja 781 seers, madum 77 and odd seers, and bhang 182 and odd seers were sold in the Vizianagram town against 781 and odd seers of ganja, 67 and odd seers of madum, and 266 and odd seers of bhang for the same time in 1892 both in Vizianagram and cantonment. The difference being so very trifling, that cannot account for either increase or decrease.

28. Quarter anna worth of bhang or ganja per day is enough for a habitual moderate consumer.

32. No social or religious customs in regard to the use of any of these drugs I have known of as existing.

33. The use of any of these drugs is considered an evil practice. No public opinion (social or religious) exists in regard to the practice. Ganja smoking is considered bad, and therefore the consumers stand very low in the estimation of respectable people. They cannot be steady-minded. I know no custom of worshipping the hemp plant in the district.

39. Smoking ganja is more injurious than eating or drinking, because smokers look more unhealthy than eaters or drinkers.

40. None recommend the use of ganja on account of its medicinal qualities. It is used in the treatment of cattle diseases. The Maharaja's stable doctors often purchased ganja or bhang to use it in medicines for treating horses and other cattle.

41. Even the moderate use of either ganja or bhang is in no way beneficial in its effects.

42. Though the moderate use of bhang is not beneficial, it is harmless if taken with spices, milk, sugar or jaggery. I have known many persons who drink bhang in the way given above who have not lost their health or mental or bodily vigour.

43. Moderate consumers are inoffensive to their neighbours.

44. The immediate effect of even the moderate use of any of these drugs is the excitement of the brain. It lasts for about an hour. The want of subsequent gratification produces desire or uneasiness unlike that which is produced by opium. In the latter the desire or uneasiness is much stronger than in the former. Some say it adds to the digestive powers and creates appetite, while some others that it does not.

45. Even the moderate use of any of these drugs affects to some extent the virile powers, and tends to increase the belief in God. I have known of several men who complained of the loss or weakness of their sexual desire by the use of ganja smoking. I have also known of some cases in which the users of ganja smoking have become sadhus or mendicants.

49. The use of any of these drugs is not practised as an aphrodisiac.

51. Yes, out of 21 on the active list of criminals in the Vizianagram town, 15 are habitual ganja smokers and opium eaters or smokers. These men commit thefts and house breakings, though not of a serious nature.

53. I have known of cases in which the excessive use of ganja smoking has made the consumers mad; but I know no case in which it led to homicidal frenzy.

54. No never.

55. Yes, several cases occurred in which criminals induced their victims to partake of madum or confection, and so stupefied them to rob them of their personal property. No complete stupefaction can be had by ganja if taken moderately. An unusually large dose, of course, brings upon the consumer complete stupefaction.

*Further paper put in by RAI BAHADUR
K. NARAINASWAMY.*

55. I most respectfully beg to submit with reference to the remarks made by the Collector, in his letter No. 1407, dated 14th November 1893, as regards my answers to question 55 of the Hemp Commission that about the year 1879 a goldsmith named Manapilli Sooryanarain and another person who was a sweetmeat-seller gave sweetmeat mixed with some preparation of ganja to a goldsmith boy aged about 8 years and decked with ornaments worth about Rs500, and when the boy became stupefied under the influence of the drug, he was robbed of the jewels he had on his person and then strangled to death. This happened at Ankapalli. The case was convicted by the Sessions Court, Vizagapatam, sentencing the goldsmith murderer to be hanged by the neck and acquitting his accomplice. This case was quoted to me by the retired head constable, one named Kella Ramaswami, who charged the case, being then the S. H. O. of the Ankapilli Police Station. A retired Police constable named Avala Polayya, who served for a long time in the Vizianagram town station, quotes another case as occurred in the town of Vizianagram. The following are the particulars:—

About the year 1877 a person of weaver caste gained intimacy with a dancing girl; one night coveting her personal property, he resorted to the plan of giving sweetmeat mixing with it *madum* (confection of ganja); but before it produced complete effect on her, he hurriedly gave a gap wound to her throat with a razor, and she woke up raising an alarm, and the man bolted away with a neck-lace, removing it from her neck hurry-scurry. The accused was sentenced for attempt at murder to 10 years' transportation.

Oral evidence.

Question 1.—I have been 17 years in the Police Department and three years in other departments. I have been the last ten years at Vizianagram. My duties take me over the Vizagapatam district and the Agency Tracts.

Question 3.—I have never heard of the hemp plant growing wild in this part of India. It is cultivated chiefly in the hills; the ganja supplied to the contractors comes from the hilly parts (the Agency tracts). The hill people cultivate for export to the plains. I have seen fields growing, small open fields behind houses on the hills, open yards behind the houses, patches of cultivation. The cultivation is not found in all the villages of the Agency; in only one-fourth of the villages, and that too not very extensively, only in three or four yards, say, out of ten. In the plains I have noticed a few plants growing behind houses; but cultivation is much less on the plains. It is not in fields, except that occasionally a few seeds are sown along with tobacco. In the Vizianagram taluk of over 270 villages cultivation is only in one or two villages. My attention had been drawn to cultivation two or three years ago. I had not noticed it before except perhaps casually. Of course I have not made any special inquiry before.

I have seen the hemp plant growing in twenty

villages out of about seventy villages seen by me in the Agencies. I did not look for the hemp plant in the other villages I visited. There are about seventy that I have not seen in the Gulgunda Agency. I should think that Gulgunda is about one-fourth of the total Agencies. What I am giving is only a general impression left as the result of visits.

Question 20.—By ten per cent. of the population I mean ten per cent. of the adult males. But I am inclined on reconsideration to say that one in fifty, not one in ten, of the adult males would be nearer the truth. I have ascertained the following figures. The population of the town is 30,881; and there would be about 500 or 600 consumers. I took a census of the people coming to the one ganja shop; one day there were over 200, the second day about 300, and third day between 200 and 300. On Sunday between 300 and 400.

Question 32.—There is no custom of using these drugs at the Shivaratri in this district. It is only confirmed smokers who call the drug the "Shiva ki buti," but not other people, here at least.

Question 45.—I have been Inspector about seventeen years. I have never in all that time had to make any report regarding a subordinate in connection with hemp drugs.

Question 51.—These men are generally opium smokers. But if they cannot get opium they will go to ganja smokers and get ganja. I have found these men smoking and hence know that they take the drugs. All fifteen take opium. And all fifteen habitually take ganja. They do not mix the two drugs. But they take both as they can get them. Opium is limited to meal times; and for ganja there is no such limitation of time. There are now twenty-five men on my list; of these, fifteen are smokers as above. We generally enter the fact of smoking on the list. We have orders issued by the Inspector General of Police to give particulars about ganja, opium or alcohol habit in our history of criminals. This has been in force for twelve months. We are ordered to give the habits and customs of known depredators in their prescribed criminal history. The order was issued in 1892.

The twenty-five names have been on my register for a long time. Some for ten or fifteen years. They were known from the beginning as smokers. But there was no record of this before 1892. There was no criminal history page before then, and I have not looked into the record of every case as made before that.

Question 53.—By mad I mean only leaving worldly concerns and leaving home and going about. I only know of one man who has gone out of his mind from ganja. He is inoffensive, but has no sense. He was a police constable. He resigned before I entered the police, or was discharged, I cannot say. He is an old man. He has been about ten years mad. He begs. I did not know him before he was mad. I was told of him after I came to Vizianagram.

70. *Evidence of T. S. KRISTNASAMY CHETTY, Vishnuvite, Pensioned Police Inspector, Trinamalay, South Arcot District.*

1. Ever since I received this pamphlet, I have been making enquiries from the consumers living at Trinamalay, and I am sorry I was not able to procure any information whatever, and so I waited hitherto for the Kirthigay festival to meet with sanyasis and others who are habituated to consume the ganja and other intoxicating substances.

3. The hemp plants are spontaneously growing in Javvadu hills and some parts of Darmapuri Taluk, Salem District, to my knowledge. It is abundant, I hear, in Javvadu hills above named.

16. The bhang is not generally prepared in living houses, but they are being prepared by ascetics, parathasees, etc., in Chatrams and Chavadees, where they generally meet, especially in Southern countries. The bhang can be prepared from the hemp plant. Ganja or charas is also prepared from the wild plants wherever grown.

19. Ganja and charas used not only for smoking, but they are used also for medicines.

20. Fakirs, ascetics, bairagis, Muhammadans generally smoke ganja all over India where they happen to go and reside, and it is difficult to state what proportion of the people use this.

24. Fakirs and Muhammadans generally eat and smoke, and the bairagis of Northern country drink bhang.

25. The use of these drugs is on the decrease, as arrack and toddy have become very cheap.

28. Habitual consumers take in average each of these drugs from one to five palams per diem, one palam being worth two annas.

32. There are certain classes of people in Southern India who worship Muni, Karuppan, Veeran, Maruthaveeran, etc., whom they call their family deities, usually offer ganja as offerings and then consume.

33. The public at large hate the immoderate consumers of these drugs and have got a low

opinion of them. It is not customary to worship the hemp plant among any sects.

39. Smoking of these drugs is less injurious than drinking, as the giddiness produced by smoking is being relieved in a short time, but the giddiness produced by drinking takes a good deal of time for relief owing to the late digestion of the substance that got into one's body.

40. These drugs are being used by Native doctors in the preparation of medicines, and they are not used in the treatment of cattle diseases.

41. It is beneficial to some extent.

42. The moderate use of any of these drugs is harmless, as it stimulates one who uses it to some extent at the time.

43. Yes.

44. Immediately it is taken moderately, it stimulates him and thus makes him to attend to his work briskly. It does refresh him. It does not produce intoxication. It does allay hunger. It does not create appetite. The effect lasts from one to five hours according to the nature of the constitution. It brings on even after-effects. The want of these drugs by consumers produces uneasiness on them.

45. The habitual moderate use of any of these drugs produces no harm whatever, physically, mentally or morally.

49. Yes; to some extent in my local enquiry.

51. Nil.

53. By taking excessively it does not make a man to commit any crime whatever, as it makes him to fall down with giddiness. I have heard of several cases it brings on temporary homicidal frenzy.

54. No.

55. Criminals in order to further their designs give them for their victims. It does bring on complete temporary giddiness on their victims.

71. *Evidence of MR. I. TYRRELL, Superintendent of Central Jail, Rajahmundry.*

I have the honour to inform you that it is a matter of regret to me that I cannot throw any light upon such an important subject that would be worth recording. To answer but a few of the different questions would take up much time, and would also require some previous study to answer the questions effectively. It is well-known by jail officials that ganja is highly esteemed by the criminal population. In every jail ganja is found from time to time when searching prisoners, and from my own experience the most hardened offenders are the greatest consumers. I have been employed as a jail official for more than 26 years, and can remember at different times during that period assaults made on jail officials, jail servants and fellow-convicts by prisoners who were at the time, when committing the assaults, under the influence of ganja. In this respect the Madras Penitentiary probably heads the list, as the jail

has generally some hundreds of habituels in it and many of them would go to extremes to get possession of ganja. Those that could manage to get money from their friends outside would pay highly for a small quantity of ganja, and those without money would give away their food for a very small quantity of this drug. I have known prisoners to chew it as tobacco is chewed; but it was generally smoked rolled up in a leaf from a tree suitable for the purpose. Had observations been recorded at the Penitentiary from 1869 to 1879, some useful information as to its baneful effects upon those using it would have been forthcoming. I should certainly say, from the number of men I have seen under its influence, that the drug stimulates the passions of some men and makes others utterly reckless, caring but little when under its influence what crimes they commit.

72. *Evidence of MR. E. L. F. CAVENDISH, Superintendent, Central Jail, Vellore.*

1. Have been Superintendent of various jails for over eight years.

2 to 46. No information.

51. Out of 187 habituals in this jail, 28 or 14·9 per cent, admit the use of ganja; the average quantity consumed daily being about 3 pies worth. Some were diffident about giving information; the number really addicted to the use of ganja may safely be put down at more. The average number of convictions against these 28 consumers is 5 including the present sentence.

52 to 53. No information.

54. Twenty-two out of twenty-eight (or 78·9 per cent.) of the habituals say they fortify themselves with ganja before committing a premeditated crime.

Extra note.—One convict in the jail is a professional wrestler of fine physique; he states before a wrestling match he always smokes some ganja and then, as he says, "I am not afraid of him."

73. *Evidence of MR. E. H. GADSDEN, Superintendent, Central Jail, Coimbatore.*

1. From enquiries made from prisoners now in the jail.

2. The definitions can be accepted in so far as this district is concerned. These are known by the names Javathu (flat ganja), subja (round), and mulki (chur).

19. These are not only used for smoking, but also in making the following preparations:—(1) A sort of preparation is made of ganja leaves with jaggery locally known by the name of majima. (2) Siddhi is made of ganja leaves soaked in milk and sugar added to it. (3) Bhang is made of ganja leaves, sugar, cocoanut and other spices. (4) A preparation called Ramrasam is made of ganja with cow's milk, cloves, cinnamon bark, sugar, and other spices. These preparations are used as sedatives.

20. Information not available.

21. The three sorts of ganja are used for smoking, but generally smokers prefer round and chur ganja.

23. Bhang is not a thing for smoking, but it is an eatable composition of ganja, sugar and cocoanut.

24. So far as this district is concerned about a fifth part of the entire population eat and smoke ganja.

26, 27, 28 and 29. No information.

37. Smokers say that they feel no difference in smoking ganja or charas.

38 and 39. No information.

41. The experience of smokers and consumers of ganja and charas lead them to think that it assists digestion, alleviates fatigue, prevents consumption and keeps the body in good health. I refer to moderate habitual use.

42. The moderate habitual use of these drugs is considered harmless.

43. Yes.

44. Produces a sort of sleep with dreams. It does produce intoxication. It is said to allay hunger and to create appetite. The want of subsequent gratification produces longing and hence uneasiness.

45 and 46. No information.

51. Fifty per cent. of re-convicted prisoners now in jail use ganja when at liberty.

52 and 53. No information.

54. The effects of using these drugs are such that criminals do not use them before they go to commit crimes.

55, 56 and 57. No information.

74. *Evidence of MR. H. E. G. MILLS, Superintendent, Central Jail, Trichinopoly.*

1. I have no personal experience in hemp drugs.

19. Ganja and charas are used not only for smoking but also for drinking purposes, called bhang. Bhang is composed of as follows:—The ganja leaf is nicely cleaned and boiled in water, after which it is strained out, the ganja leaves ground down to a chutney, after which milk or water is added, mixing the following ingredients to give it a flavour, viz., black pepper, khus khus, cocoanut, dry ginger, aniseed and sugar, which is made like coffee and drunk. This bhang is much used in native gymkhanas.

20. No information.

21. The flat kind ganja is preferred for smoking in this part of the presidency. Charas is used in smoking in Bengal and in the Punjab.

23. Bhang is not used for smoking in these parts.

24. Fakirs, mustans, and those that have

entirely given themselves up to religious purposes eat ganja. Bhang is consumed in native gymkhanas.

26. (a) Habitual moderate consumers, $\frac{1}{4}$.

(b) Habitual excessive consumers, $\frac{1}{4}$.

(c) Occasional moderate consumers, $\frac{1}{4}$.

(d) Occasional excessive consumers, nil.

27. No information.

28. (a) Habitual consumers (moderate), 1 pie per day.

(b) Habitual excessive consumers, 4 pie per day.

29. In this part of the presidency tobacco is mixed with ganja by different classes of consumers. The object of these admixtures is to give the smoke a flavour and increase the power of intoxication. Bhang massala, which is sold for the purpose of being mixed with any of these drugs, is as follows: Black pepper, khus khus,

aniseed, dry ginger, cocoanut, and at times a little over-ripened plantain is used also.

37. Charas smoking is very rare here; it is said to be used by the richer community.

38. No information.

39. Drinking or eating the hemp plant in any way is injurious to the brain; it soon makes one insane. Smoking, although less dangerous, takes time to cut up the constitution, weakening the nerve system.

41. It is not beneficial in its effects.

(a) As a food accessory on digestion, nil.

(b) At the same time it may give staying-power under exertion or exposure, but at the end it is detrimental to health in general.

(c) Not known. Moderate habitual and moderate occasional use of the drug are both dangerous.

42. The moderate use of any of these drugs is far from being harmless. They gradually tell on the whole constitution.

43. Generally inoffensive to their neighbours.

44. For the time while under its influence it is refreshing. It produces intoxication, combined with a peculiar stupidity. Hunger is allayed, and its after-result is that it creates a false appetite. The effect lasts about one hour. Yes, the limbs and nerves become quite weak, and a

kind of dull sensation prevails. Yes, the want of it produces a great longing and desire, and great uneasiness prevails.

45. Yes; physically, mentally and morally. It impairs the whole constitution gradually by a regular decline of muscles, and finally emaciation sets in.

46. No information.

51. All fakirs and wanderers from place to place, and those who are habitual gamblers with no permanent mode of living resort to ganja smoking; for want of the drug, whether moderate or excessive, leads to crime.

52 and 53. No information.

54. It is not used to fortify one's self to commit premeditated crimes or violence; but when under its influence at times it leads to crime coupled with timidity.

55. Yes; criminals do at times, to further their designs, induce their victims to partake of the drugs to stupefy them.

No; complete stupefaction cannot be induced by this drug without admixtures.

57. No information.

4 to 7 per cent. of the previously convicted prisoners now in jail have been accustomed to the use of hemp drugs.

75. Evidence of MR. G. CLONEY, Superintendent of Jail, Tanjore.

1. My information has principally been obtained by coming in contact, while jailor at Berhampore, etc., with criminals and insanes that were consumers of the various hemp drugs, and partly from observation of pilgrims to the shrine of Jagannath (Puri). Large bodies of these pilgrims from Southern India *en route* to Puri used to encamp in the vicinity of the jail. I had opportunities, too, of observing the pilgrims, from North India, to the same shrine.

2. Charas is not generally known or used by the people locally (Tanjore). Flat and round ganja are well known, and the definitions may be accepted. "Chur" or broken ganja is known, locally, as natu ganja, that is, country ganja.

19. Ganja is used (a) for smoking, (b) for eating. It is used as a vegetable curried with fowl or fat mutton or made up into halwa (electuary). (c) For drinking, it forms one of the ingredients in sherbets. The above are some of the uses to which the consumers put the drug. (b) and (c) perhaps require a little explanation:—

The object of cooking ganja in a curry is, is it supposed, to initiate the tyro, who would otherwise hesitate to eat or smoke it. It is needless to say habituals also are fond of the curry. Mixed with the halwa it serves the same purpose as the curry. The sherbets, in different but a more enticing form, keep the same object as the curry in view. A brief description of the sherbets and the halwa may not be out of place.

Halwa. For a month's supply for a moderate consumer. The following are the quantities or weight of the ingredients:—

	Rs.	A.	P.
12½ oz. ganja	0	3	0
12½ oz. ghee	0	6	0
3½ lbs. refined sugar	0	7	0
1 oz. spice	0	1	0
12 pips or kernels of almonds	0	0	6
1 oz. cuscus or poppy-seed	0	0	3

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The ganja is thoroughly cleaned and boiled. The water in which it has been boiled being thrown away, the ganja is put out to dry, and in order to remove any lingering moisture, it is placed in a pan over a slow fire, thoroughly dried, and then reduced to a fine paste. The ghee is put into a dekeha and boiled and the ingredients are one by one dropped into the boiling ghee and stirred until the mixture has reached the desired consistency. This preparation is supposed to keep good for six months, but as age seems to detract from the virtue (intoxicant) of the ganja a supply enough only for a month or two is made. A bolus the size of a walnut is taken twice a day before the principal meals to induce appetite and the sensation of intoxication.

Bhang sherbet, occasional drink for a day. Necessary to be made daily.

	Rs.	A.	P.
2 cocoanuts or 1½ pint cow's milk	0	1	0
45 grains ganja	0	0	1½
Refined sugar	0	1	0
6 pips almonds	0	0	3
¾ oz. cuscus (poppy-seed)	0	0	2
Spice	0	1	0
4 ripe plantains	0	0	4
and some rose petals.			

The mixture will give about two pints bhang sherbet. The ganja is boiled and the water thrown away. It is then ground into a very fine paste and strained through a piece of muslin. The other ingredients are now ground and added to the ganja extract. The whole is then mixed with cow's milk or the extracts of the cocoanut kernel, and strained. Sometimes the seed of the common mint or subja plant (Isphogal) is added, as the natives say, to cool the blood. Its mucilaginous properties are known to cool the blood, but the seed is possibly used to counteract the heating propensities of the spicy ingredients. Moderate con-

sumers use a pint of sherbet before each principal meal. It is said that the intoxication is greater and of longer duration than that produced by simply smoking ganja.

Baja sherbet—

	Rs.	A.	P.
12 bottles toddy vinegar	0	3	9
675 grains (apothecary's weight) ganja	0	1	3
Refined sugar	0	7	0
30 limes	0	2	6
Pepper	0	0	2
Dried ginger	0	0	1
Cardamoms	0	0	1

The ganja is prepared similarly as for bhang sherbet. The vinegar is poured into a large vessel and the sugar and ganja are mixed with it. The juice of the limes is then expressed into the vinegar, etc. The pepper, ginger and cardamoms are now reduced to a fine powder and thrown in. The whole is thoroughly mixed, strained, and bottled as ginger-beer might. In order to produce fermentation, the bottles are left out in the sun for three days, thereafter the sherbet is fit for use. It is said that this sherbet will keep good for twenty days; that it intoxicates but slightly; and that it is intended to be taken in the hot weather in order to thin the blood.

20. Charas, it is said, is not obtainable in these southern parts. A little is sometimes procured from pilgrims, fakirs, Kabulis, etc. Those who have used it, speak of its being a more powerful intoxicant than ganja. The reason is not far to seek, $\frac{1}{2}$ to $\frac{1}{4}$ a grain producing about the same effect as 20 to 30 grains of ganja.

21. Flat ganja is preferred for smoking. Round ganja is spoken of as being heating to the blood and less intoxicating than flat ganja. Flat ganja is the preparation mostly in use in Southern India. Charas in Northern India.

23. The distinction between bhang and ganja by Dr. Prain in his definitions is not observed by the natives of Southern India, they indifferently using the name bhang and ganja for the same drug.

24. The classes that eat bhang also drink it. The use of bhang is prevalent to a certain extent even in the most out of the way villages, but in towns it is largely used by Muhammadans, fakirs, pilgrims and idlers.

26. No information.

27. From my knowledge and experience I should say that habitual excessive ganja smokers belong to that class, summarised under the definitions bad and doubtful livelihood, vagrants, fakirs and the criminal classes generally. In a few cases as in those of the well-to-do Muhammadans and Hindus who lead listless and sedentary lives, ganja has powerful attractions. It excites their appetite and removes the insufferable ennui of their existence. In this instance the aimless life may be said to beget the ganja habit, but, generally, as in the case of the ordinary individual, the ganja habit (to excess) begets demoralization. The price of the drug as compared with that of the cheapest of spirituous or fermented liquors is one of the chief reasons that leads those desirous of intoxication to resort to the practice.

28. (a) An habitual moderate consumer uses about 45 grains (weight $\frac{1}{4}$ Re.), price 1 to 1 $\frac{1}{2}$ pie.

(b) An habitual excessive consumer uses about double or treble the quantity of (a), the habitual moderate.

29. The ingredient ordinarily mixed with flat ganja for smoking is tobacco. Dhatura is never used by habitual moderate consumers. The object of mixing tobacco is to remove the acrid vegetable taste of ganja and to prevent the secretion of phlegm. The habitual excessive consumer becomes so accustomed to ganja that sometimes it has not the desired effect; dhatura is then used with ganja and gives the necessary intoxication. Bhang massala is sold. The ingredients are mace, cloves, almonds, etc.

37. *Vide* paragraph 20.

38. *Vide* reply to paragraph 21. Chur or broken ganja has no different effects in kind or degree on consumers, except that its cleaning is tedious, being adulterated with sand and leaves of other plants.

39. Bhang drinking is stated to be the best form of consuming ganja, but is costly and difficult of preparation by travellers. People in easy circumstances prefer bhang drinking to ganja smoking; it is said to be pleasant to the taste, and as it contains nutritious ingredients it is less injurious than ganja smoking. It is well known that habitual excessive ganja smokers and opium eaters are fond of rich food, otherwise it is said that their constitutions break down.

41. The moderate use of either charas, ganja, or bhang is said to be beneficial in its effects—

(a) It is digestive. (b) It gives staying-power under severe exertion or exposure and alleviates fatigue and pain. (c) It may or may not be a febrifuge, but it is well known that natives resort to ganja smoking to counteract the effects of bad water and malaria. It may therefore be said to be prophylactic.

The classes that use the drug for the above purposes are pilgrims, fakirs, and sepoys. As a preventive of disease, coolies and artisans in unhealthy districts are supposed to resort to smoking. Their proportion is not known. The reference is to habitual moderate consumers. It induces sleep. Is a nervine stimulant and an antispasmodic. Native vets also make use of it in certain diseases of horses and cattle.

42. No information.

43. Moderate consumers become, after their pipes, rather garrulous. Their garrulity is sometimes annoying to their neighbours, but I should say they are inoffensive.

44. The immediate effect of the moderate use of bhang or ganja on the habitual consumer is refreshing. Its secondary effect is to produce intoxication and sleep. It is said to create appetite, but as it produces sound sleep, hunger, consequently, cannot be felt. I cannot say that it allays hunger. The effect of the drug lasts about three to four hours. The after-effects on the habitual excessive consumer are lassitude and enervation. The want of the drug produces nausea, indigestion and flatulency in the habitual excessive consumer and sometimes a species of insanity.

45. The whole set of questions in this paragraph may be replied to in the negative except that, being an aphrodisiac on that account it may be said to impair the moral sense.

46. The habitual excessive use of any of these drugs does produce noxious effects. If good nourishing food is not obtainable the constitution is impaired. As the individual gets used to the drug it causes loss of appetite. Yes, when nourishment is insufficient a derangement in the

system is caused, and consequently dysentery, diarrhoea, bronchitis or asthma. In the earlier stage it produces immorality and induces laziness, but in the latter, it puts immorality beyond power, his health being impaired. It deadens the intellect and produces insanity. Temporary mania is produced and the symptoms are re-induced by the use of the drug after liberation from restraint. The typical symptoms are neglect of the person, restlessness, timidity, vacant staring expression and want of appetite. Insanes who have no recorded ganja history readily confess. When spoken to about ganja they at once go through the motions of cleaning and preparing the drug, and seem to derive pleasure in discussing it.

51. Habitual moderate consumers of hemp do not form any large proportion of bad characters. The moderate use of hemp has no connection

with crime in general or with crime of any special character. The present number of re-convicted criminals is 92, and of these 6 are evidently habitual moderate consumers, and 1 only an habitual excessive consumer.

52 to 54. No information.

55. I have heard of cases in which criminals, in order to further their designs, induce their victims to partake of these drugs and so stupefy themselves. Invariably dhatura is said to be mixed with ganja in order to give a quicker effect. Complete stupefaction can be induced by the drug alone.

56. (a) and (b) by admixture of tobacco the effects are lessened; by admixture of dhatura the effects are increased.

57. Already answered in body of report.

76. Evidence of MR. R. W. MORGAN, Deputy Conservator of Forests, Ootacamund, Nilgiris.

1. I have been 23 years in the Forest Department and during that period have mixed with all classes of persons who are in the habit of using ganja, etc., and have seen the plant cultivated and wild in many places.

2. I only know of two products of the hemp plant that are used in Southern India, ganja and bhang. Charas is used by Muhammadans; but I know nothing further about it.

3. I have seen hemp growing spontaneously in Kurnool, Malabar, Coimbatore, Nilgiris, Trichinopoly, and Coorg. It used to be at one time abundant on the Nilgiris, but does not appear to be so common now.

4. Nil.

5. Wild hemp grows best with a rainfall of 90 inches at an elevation of from 2,000 to 5,000 feet above the sea level and in the very richest soil. It is most commonly found wild and growing vigorously in old cattle kraals and in the neighbourhood of villages in dung heaps, etc.

6. I have seen the wild hemp growing in dense patches of from 30 to 100 square yards and also as solitary bushes. It generally commences to grow in a scattered manner; but after a few years, when the soil has been filled with seeds, it spreads rapidly and forms a dense growth.

7. There is now no cultivation of hemp in the Nilgiris as raiyats and others are under the impression that it is forbidden by Government; but a few plants are surreptitiously grown by aboriginal tribes (principally Sholagurs) in old cattle kraals in the jungle. I have never seen hemp cultivated for its fibre, as most natives are ignorant of the fact that the fibre is valuable. There is considerable cultivation of hemp in many of the districts of the presidency.

8. There has been a decrease in the cultivation for the reasons given under 7 in the Nilgiri district and Wynaad.

9. The method of cultivating hemp is to scatter the seed broadcast in old cattle kraals. When the plants grow they are thinned out to 5 or 6 feet apart and allowed to branch. All male plants are pulled up and the flowering tops collected when they become sticky and covered with resin. All large leaves that grow in the inflorescence are removed.

10. No, they do not form special class. Many

ganja smokers cultivate the plant themselves and others purchase what they require. I have known all classes cultivate hemp; I have seen much hemp cultivated in Tanjore district.

11. Yes.

12. Yes. Coimbatore, Mysore, Malabar. The extent is very small and the cultivation carefully concealed and never attempted near villages, but usually in isolated spots in the forest. The male plant is usually extirpated. The Sholagurs are afraid of police action, hence their care in concealing the cultivation. They believe it to be illegal.

13. I am not aware of any part of the Presidency where the hemp plant cannot be cultivated as it will grow from the sea level to 7,000 feet above it. I have known ganja manufactured in Ootacamund.

14. Yes. All these products are prepared. I cannot say to what extent.

15. I have only seen ganja prepared. The inflorescence of the female plants is collected when resin has fully developed, dried, tied in bundles, and pressed tightly into a bale with cloth round it. In this state it appears to undergo fermentation, as is the case with tobacco. Of this, however, I have no positive knowledge, as I have only been told so by others. When cured it is stored in a dry earthen pot or other vessel, which is kept closed.

16. Yes. As far as I know, both ganja and bhang can be prepared from the wild and cultivated varieties of hemp wherever grown; but the quality and strength of the manufactured product depends greatly on the soil, elevation, climate, and amount of cultivation bestowed upon it.

17. By all classes.

18. Yes, if the drug is exposed it is subject to mildew and deteriorates. It is usually kept in earthen pots or tin boxes by the retail dealers.

19. Hemp products are used medicinally for smoking and drinking in this presidency. Ganja is used for making subja water. This is made as follows:—Subja seeds are soaked in water and the mucilage thus produced mixed with milk, sugar, dhatura seeds, and powdered ganja. This preparation is usually made by Muhammadans. Majum is made by grinding up ganja and jagger together and forming the mass into small tablets, which are usually sold by Rajput sweetmeat vendors. These tablets are eaten. "Thathu pushti

laghium" is made of jaggery, ganja and various medicines compounded together. This is administered to invalids and is considered tonic. Ganja is administered to elephants as a tonic mixed with other medicinal substances. It is also given to cattle: eggs, ganja, and castor oil being mixed together. This mixture is supposed to make cattle robust. Muhammadans sometimes use ganja as an ingredient in curries.

20. All classes smoke ganja, but not many individuals in a class. Sholagurs are much addicted to it, and more than half the tribe smoke it. Bairagis are much given to the habit. Shi-ans smoke ganja to the extent of about 10 per cent. of the population. Rajputs are great ganja smokers. Muhammadans use it to a small extent, though it is forbidden by the Koran.

23. Yes; by Muhammadans principally.

25. I consider that the use of these drugs is on the increase. I have noticed that more persons have contracted the habit, even Rajput school-boys.

28. For a moderate smoker about 3 pies' worth, say $\frac{1}{2}$ of an oz. For an excessive smoker about 10 oz., or 2 annas worth. These are old rates before the hemp drugs were taxed.

30. The smoking of ganja is openly practised and in company. It is confined to men. I have never known women or children smoke it. Rajput boys of 10 or 12 years of age smoke ganja without their parents' knowledge.

31. Yes. It is very difficult to break off. There is a strong tendency towards excess when the habit has once been contracted.

33. The habit of ganja smoking is viewed by all natives (except the consumers) with disapprobation. It frequently causes the entire ruin of men, physical and moral, and bhang and ganja smokers are held in disrepute.

34. It would be a serious privation to excessive smokers and consumers of hemp drugs to forego their consumption. It would even cause death in some cases. I have known men behave like maniacs when deprived suddenly of ganja.

35. No, the drug would be obtained illicitly and wild hemp drugs consumed in default of the very superior cultivated article. Serious discontent would ensue, but it would not amount to a political danger. Many ganja smokers and eaters, if absolutely deprived of the drug, would probably take to opium smoking or eating as a substitute, and this would be a great gain, as opium smoking is harmless.

36. I do not think that alcohol is used as a substitute for hemp drugs or would ever be so used.

40. Yes; ganja is extensively used medicinally by all native vythians and also in veterinary practice.

41. The moderate use of bhang may be beneficial medicinally for asthma and other diseases. The smoke of bhang is probably a germicide and disinfectant, and this may act as a preventive of disease.

42. I do not think the moderate use of hemp drugs can be harmless to a healthy man. The symptoms exhibited after smoking ganja are such as to prove decisively that it cannot be harmless. The smoke is invariably swallowed and causes irritation of the stomach and violent coughing; the eyes generally become bloodshot and a general stupidity ensues.

43. Yes, as a rule.

44. See 42. Intoxication is produced. It does allay hunger, but does not create appetite. The effects last from 20 minutes to several hours. This depends entirely on the period that the consumer has been practising the habit. The effects are very bad in those who first contract the habit. They either laugh continually and insanely, or shed tears or become absolutely stupefied by the drug. Subsequent inability to gratify their desire causes great uneasiness and irritability.

45. Undoubtedly. Even a moderate use of the drug causes moral and physical deterioration, but not disease. It is the immoderate use of the drug, however, that is so ruinous.

47. No.

49. Never. Ganja-smoking produces impotence.

51. I do not think that ganja-smoking incites to crime.

53. Not that I am aware of.

54. No.

55. No doubt complete stupefaction is often induced by those not accustomed to the use of the drug.

56. Dhatura is frequently mixed with ganja in the preparation of the mixture known as subja to increase its narcotic effects.

58. The excise system now in force is working fairly well, but considering the generally pernicious effects of hemp drugs, the tax might well be raised.

60. A tax on the cultivation of the plant should be enforced in addition to a tax on the sale of drugs, and the cultivation of the plant without a license made penal.

65. Considering the pernicious effects of ganja and other hemp drugs, I think that the tax should be made so high on both the (a) cultivation and (b) sale as to make the use of the drug prohibitive. The result of such action will be probably to drive the consumers of these drugs to the use of opium, which is practically harmless. Even school-boys are now learning to smoke ganja (especially Rajput's children), and strong measures are necessary to repress the practice.

66. No; I would tax all hemp products equally, as they are alike pernicious.

68. No.

69. Not that I am aware of.

77. Evidence of Mr. G. HADFIELD, Deputy Conservator of Forests, South Malabar.

1. My experience with the people of the many districts in the Madras Presidency where I have been employed.

2. No. I know of only two sorts here, ganja and chadaganja. Both the round ganja and broken ganja are known here by the simple name of ganja, and flat ganja by the name of chadaganja.

3. I know of no districts where it grows spontaneously.

4. By the simple name of ganja.

5. In alluvial soil the plant grows well. It grows well up to 3,000 feet above the level of the sea.

6. I have only seen wild hemp cultivated in the backyards by those addicted to it, where it grows densely.

7. *Vide* my answer to question 6. It is intended for production of ganja chiefly and for charas also which is called locally majum.

9. It is raised by seed in the nursery, and transplanted when they are about three or four inches high, six feet apart in well-manured pits.

10. There is no special class that takes to the cultivation of ganja. I have seen all nationalities cultivating it more or less.

11. Yes.

12. Yes. Wynaad, Malabar, Tinnevely, Madura, Tanjore, Trichinopoly, Coimbatore, Kurnool, Godavary and Cuddapah. Yes the male plant is extirpated.

14. (a) Yes.

(b) Yes.

(c) Yes.

In big towns they are prepared and sold in bazaars.

15. The following are the preparations that I know of:—

A. *Smoking*.—Ganja or chadaganja and tobacco are taken in two to one, and cut very finely, and mixed after rubbing in the palm of the hand for some time, and smoked in different models of pipes. The more rubbed the more the intoxicating effect, they say (smokers).

B. *Eating*.—The dried leaves are eaten with

fried peas, and also powdered and mixed with meat and fried.

C. *Drinking*.—Chadaganja is first soaked in cold water for one or two hours, and then ground and mixed with milk, water and jaggery syrup, and spices are also added. This mixture is called bhang.

16. Yes.

17. By the consumers generally and sweetmeat-makers too.

19. No. They smoke, eat and drink.

20. The poorer classes and bairagis, sanyasis and other religious mendicants.

21. Chadaganja.

29. Tobacco, jaggery, flesh and fried peas.

30. (a) Mostly practised in company and rarely in solitude.

(b) Yes.

31. (a) Yes.

(c) Yes; I hear.

33. The Hindus consider ganja as the hair on god Siva's head and some that are addicted to its use worship it. The bairagis and sanyasis are the people that mostly worship it.

35. (a) Yes.

(b) I think so.

(c) By stringent rules.

36. I do not think it is.

40. Yes.

41. I think so, as I see some of the hill tribes using it.

42. I consider it very harmful, as I see persons addicted to it getting cough in the long run and becoming emaciated.

43. They are not offensive.

45. (b) and (c) Yes.

(d) Asthma.

(e) Produces laziness and in the long run impotency.

49. (a) Yes.

62. It should be controlled.

78. Evidence of Mr. C. E. HARDIE, District Forest Officer, Manantoddy, North Malabar.

1. A residence of four years among the hill tribes of the Wynaad.

2. "Bhang" and "ganja" are synonymous terms in the Wynaad for the unfertilized flowering tops of the female hemp plant, dried and pressed. The other names are not known in the Wynaad.

3. The hemp plant grows spontaneously from the seeds of cultivated plants adjacent, but these are few and scattered. I have seen such plants in the Travancore and Tinnevely ghats and in the Wynaad. I have never seen the plant wild where there was no cultivated plant near.

4. I know of only one plant called bhang and ganja. Hindustani-speaking people call it bhang. Malayalis and Tamils call it ganja. The prepared product is known as bhang, bhang and

ganja. Bhang is used by the Canarese-speaking people of the Wynaad.

5. I do not understand what is meant by wild hemp. If it is the plant growing spontaneously from the seed of the cultivated plant, it grows best between two and four thousand feet in virgin forest soil in places having an annual rainfall of from 50 to 100 inches and over.

6. Scattered.

7. In the Wynaad no proper cultivation so called is resorted to, but almost every raiyat has a few plants (four or five to 100 or so) near his house, which is produced by sowing some seed broadcast among the other plants surrounding the house. Little or no care is taken of the plants, except keeping down the weeds and cutting away

the male plants as they begin to flower. It is so cultivated chiefly for ganja.

8. Owing to a greater demand for ganja from the coast, cultivation as described above is slightly increasing year by year.

9. Answered by paragraph 7.

10. All castes of raiyats grow the plant as described *supra*.

11 and 12. Seed is sometimes collected from the spontaneously grown hemp, which again is from the seed of the cultivated plant. In any case the male plant is cut down.

13. In North Malabar the Wynaad Taluk is best suited for the growth of the plant owing to elevation and soil. The coast Taluks would be unsuitable, but I cannot say that its cultivation there is impossible.

14. Bhang and ganja are synonymous terms in the Wynaad. Charas is not known. The extent cannot be estimated owing to the scattered nature of the cultivation.

15. There is no difference of preparation.

(A) For smoking a small quantity of ganja is put into the palm of the hand and washed with water till a greater or less amount of the green colouring matter is removed, and then it is chopped up with about an equal quantity more or less of tobacco and smoked in the usual way.

(B) For eating a preparation called "Lekhiam" (confection) is made from the following recipe:—

	Tolas.
Powdered ganja	6
Almonds	1½
Cubebs	1½
Poppy seeds (casa casa)	1½
Nutmeg	1
Mace	1
Dry ginger	1
Cardamoms	1
Cloves	1
Cinnamon	1
Sugar	1
Jaggery	1
Ghee	25

The whole is well ground and mixed together and heated to make into a consistency of pill mixture. Half an ounce of the confection is a dose.

"Majum" or pills is another preparation for eating, and the following are the ingredients that go to make it up:—

	Tolas.
Ganja	4
Poppy seeds	½
All spices	2
Sugar	1½ lb
Jaggery	½

made into a consistency in the same way as the former. Ganja is also eaten in another form by excessive habitual consumers. It is ground with massala for making meat curries.

(C) For drinking. The preparation for this purpose called "subji" is as follows:—

Six tolas of ganja is ground in milk and sufficient spice added for flavour. More milk is then

added to make up a quart. Dose—One wine-glass.

16. Yes.

17. By all castes who cultivate the plant.

18. Ganja loses its narcotic power by being kept and is also liable to attack by insects. If secured in air-tight boxes it keeps longer; but as a fact in the Wynaad it is seldom or never kept longer than a year or till the next crop.

19. Ganja or bhang is used for smoking, eating and drinking. Please refer to paragraph 15.

20. All classes in the Wynaad who live in the jungles smoke ganja; probably 50 per cent. of the population.

21. The flat ganja alone is known in the Wynaad.

22. The name charas is not known in the Wynaad; but nevertheless it is used by native doctors for pills, chiefly for children. It is sometimes locally made by the Vythiars (native physicians) from ganja by washing, but generally brought up from the coast.

23. *Vide* paragraph 20 above.

24. Very few eat or drink bhang in the Wynaad. It is chiefly smoked, being less expensive and easily prepared for the purpose.

25. Ganja smoking is slightly on the increase in the Wynaad, as its efficacy or supposed efficacy for preventing fever is becoming better known.

26. (a) 50 per cent.

(b) 20 per cent.

(c) 25 "

(d) 5 "

27. Raiyats of all classes living in the jungles, criminals and beggars.

28. For a habitual moderate consumer it costs about six pies per diem, and for a habitual excessive consumer, from nine pies to one anna.

29. Ordinarily tobacco forms the only admixture. Exceptionally opium is added to make it more powerful. The well-to-do also add sandalwood.

30. Not known.

31. Yes.

32. The custom is in disrepute owing to the belief that only bad characters indulge in it.

33. For those who cannot afford to buy liquor it would be a privation. It is impossible to give the numbers of each class.

34. It would be feasible to prohibit its use generally, but the drug will be illicitly consumed to a certain extent. The prohibition will occasion some discontent among the poor residing in malarious places and badmashes, but will not amount to a political danger. Alcoholic stimulants and other drugs will be resorted to.

35. In the Wynaad alcohol is not taking the place of ganja among the poor, owing to its dearness; but among the well-to-do classes it is to a certain extent.

79. *Evidence of COLONEL H. S. ELTON, Commandant, 16th Regiment, Madras Infantry, Bellary.*

1. The information has been gathered from amongst the different ranks of the regiment. As a rule, ganja, etc., is not much used in Southern India. I have very little personal knowledge of the subject.
2. Yes.
3. Bundlekhand. Reported in abundance.
4. Ganja, bhang and charas. All refer to the same plant.
5. Rain necessary, also level ground.
6. Scattered.
8. Not known.
10. No. Same classes as other agricultural cultivators.
15. (a) Smoking { Ganja.
Charas.
(b) Eating } Bhang.
(c) Drinking }
17. All classes.
18. Keeps good for about one year, after which it is liable to deterioration.
19. Yes.
20. All classes.
21. Round ganja.
23. No.
24. All classes.
25. On the decrease in the regiment.
26. All habitual moderate consumers in the regiment.
27. All classes.
28. (a) In weight about four annas, in price about three pies.
29. (a) With ganja—tobacco.
- With bhang, saut, black pepper, poppy seed, milk, sugar, water. Yes, dhatura is used for greater effect.
30. Generally in company, occasionally alone. Men and women (in Jabalpur many women take it). From manhood to death. Children never take them.
31. Gradually formed and can be broken off. No great tendency for the moderate habit to develop into the excessive.
35. If prohibited, some other stimulant would probably be used.
40. Yes.
41. (a) to (d) No.
- All classes. Moderate habitual users.
42. Not harmless. Men who consume it get thin, weak, and useless.
43. Yes.
44. Not refreshing. Yes ; produces intoxication.
45. Physical, yes ; mental, occasionally ; Moral, no. Impairs the constitution. Causes dysentery and asthma. Does not impair the moral sense or induce laziness, etc.

80. *Evidence of CAPTAIN F. L. JONES, Commandant, 3rd Madras Lancers, Bellary.*

10. The Reddi caste are the usual hemp cultivators.
16. No. It cannot be prepared easily wherever the plant grows.
18. These drugs don't deteriorate as a rule by keeping. But after many years they deteriorate. They are generally kept inside damp and moist cloth.
19. No. Ganja is often saturated with milk and used as a drink.
20. Sanyasis (hermits) and travellers smoke ganja, also low caste people and Bengalis.
21. Fakirs smoke the flat kind of ganja.
22. Native charas mainly.
23. Yes, sometimes, and by the same class as before mentioned.
26. Ganja, the one most commonly used. But bhang is used on special occasions, such as festivals or dinner occasions.
28. (a) One anna per diem (about).
29. Ordinarily jaggery and ground poppy seeds are mixed with bhang. Dhatura occasionally, the object being to let the drug take greater effect.
30. Children do not consume the drug.
31. It is about on a par with alcohol, but the habit is not difficult to break off.
34. Not so serious as opium.
35. Yes, in Madras. The prohibition would not occasion serious results in Madras.
43. No. Most natives object somewhat to ganja smokers as neighbours.
53. Yes.
69. The wishes of the people are not usually consulted.

81. *Evidence of CAPTAIN C. M. KENNEDY, Commandant, 1st Pioneers, Trichinopoly.*

1. Personal observation of the habits, conduct, etc., of men addicted to them. Careful enquiries made from trustworthy native officers who are well acquainted with the effects of these drugs on those who use them.
42. The moderate use of bhang apparently does little harm for some time, but invariably in the long run it impairs the intelligence of those who indulge in it. A consumer cannot do without it, and it is a craving which must be satisfied.
43. As a rule. Charas intoxicates very rapidly.
44. Charas excites and intoxicates very easily and rapidly. Ganja does not excite appetite or allay hunger, nor does charas. Bhang may be said to do so slightly. The want of subsequent gratification is severely felt by habitués, and they become useless and incapable of any work.

45. (b) Always in the long run.
 (f) Yes.
 46. The habitual use in excess of these drugs produces marked symptoms of mental and physical deterioration very rapidly.
 47. The children are as a rule weakly and puny.
 48. No; apparently it has the opposite effect, and takes away desire of sexual intercourse.
 49. To a greater degree.
 50. Those who consume them are generally from a military point of view worthless characters.
 51. As above. In a greater degree.
 52. Yes; particularly ganja. In nearly every case of murder, by shooting, etc., which have occurred of recent years, the perpetrator has been a known ganja or charas eater.
 53. Very probably.

Oral evidence.

I have named Subadar Major Mahomed Mur-

taza Bahadur as a witness. He is the senior Native officer in my regiment, and one of the chief of those whom I have consulted. He is the source of most of the information I have given in my written answers.

My answers No. 46 and No 51 are based in part on observation of men in the regiment who are excessive consumers; but mainly on enquiries from and conversation with Native officers. These answers deal solely with excessive use of these drugs.

My answers No. 47 and No. 53 are based wholly on information received from the Native officers. I have had no opportunity of observations such as would justify me in having any opinion of my own regarding Question 47. And I have never had a case such as is described in answer 53 in my regiment. I recall a case of that kind which happened in another regiment at Bangalore. My Subadar Major knows the details.

82. Evidence of SUBADAR MAJOR MAHAMMAD MURTOZA, 1st Madras Pioneers, Trichinopoly.

19. Only used for smoking.
 20. Chiefly by fakirs and Bairagis.
 21. Flat is preferred for smoking.
 22. Native charas is used.
 23. No.
 24. It is a common beverage among Marvadies and some of the people in Hindustan in hot weather.
 25. Ganja use is on the increase, as it is considered it possesses digestive and strengthening power.
 26. (b) Communities of jogies and fakirs.
 (c) and (d) Very few.
 27. Muhammadan fakirs and Hindu jogies take it for the purpose of forgetting worldly matters.
 28. (a) Three or four pies.
 (b) One or two annas.
 29. Tobacco is mixed with ganja for smoking. Dhatura is used to strengthen the effects of ganja. Bhang massala is composed of poppy-seeds, pepper, dry ginger, cucumber seeds, sugar, milk, plantains, etc., etc.
 30. Chiefly confined to male sex. Hindu prostitutes also use it.
 31. (a) Yes; easily formed. (b) Difficult for habitual consumer to break off.
 (c) Yes.
 32. It is not essential.
 33. No worshipping is necessary.
 34. Yes; for habitual consumers.
 35. (a) No; might be done by degrees.
 (b) Yes.
 (c) Only by degrees.
 (d) Yes.
 (f) Yes.
 37. The effects of charas are more marked than that of ganja or bhang.
 38. Round has most effect.
 39. Drinking has least effect.
 40. Yes; by many native doctors.
 41. (a) (b) and (c) To a certain extent.
 (d) Keeps warm and removes cold. Used by wandering hermits and who undergo different climates.
 42. It would be beneficial if used moderately by those who use it habitually.
 43. More or less.
 44. Produces intoxication, creates appetite, warms system. Yes, want of subsequent gratification produces longing and uneasiness.
 45. (a) May produce mental, as it affects the brain.
 (b) Yes; if insufficient food is taken.
 (c) Only if used in excess.
 (e) Impairs the moral sense, induces laziness, etc.
 (f) If used in excess.
 46. See above.
 47. It does not appear to.
 48. Children are puny.
 49. (a) Yes, sometimes.
 (c) Yes.
 (d) Yes.
 50. See above.
 51. Yes.
 52. Yes; almost all cases of murder, etc., by shooting have apparently been due to the use of ganja.
 53. Yes.
 54. Yes.
 55. (a) and (b) Yes.

Oral evidence.

My home is in Vellore. I have been 27 years in the 1st Pioneers and am now Subadar-Major Bahadur. My replies are based on my regimental experience, also on facts picked up outside the regiment, in the various places I have served in, and also on hearsay.

In my regiment there are now some thirty or

forty consumers of ganja. Formerly there were far more. Formerly there was great consumption owing to the cheapness of the drug. Now rum is given to the men on hard work on campaigns at a considerably reduced rate ($2\frac{1}{2}$ annas worth for one anna). They thus acquire the habit of drinking liquor instead of using ganja.

The use of ganja is generally practised in secret. The men do not like the native officers to know about it. But we get information. When his conduct begins to show signs of it (for the use of ganja leads to the deterioration of the sepoy), then the explanation offered is that he has taken to ganja. If his conduct had not begun to deteriorate, I should not hear anything of it; for he would practise the use in secret. The thirty or forty men to whom I have above referred are men whose conduct is not as good as it was. Apart from bad conduct no intimation would come to me.

When I hear of a man being thus careless or bad in his conduct, I send for him and ask him about it. He denies the use as a rule. The reason is that a man who neglects his duty or is of bad conduct owing to the use of the drug is liable to be discharged. There is no rule to this effect. But soldiers are bound not to give themselves to intoxicating drugs such as ganja or opium or to liquor in excess. There is no penalty attaching to the moderate use of drugs or liquor. So long as a man takes them in moderation and keeps hold of himself there is no harm. These thirty or forty men to whom I have referred are none of them bad enough to be discharged. But all of them show more or less signs of deterioration. They have more or less acquired the habit so as to affect their characters. I do not think there are many moderate consumers in the regiment besides them. Native officers know such matters well. These consumers are not respected in the regiment. The non-consumers look down on and avoid them. They are both Musalmans and Hindus and also Aghyans (or low caste people). Foreigners are not enlisted in our regiment.

I never report to the Commanding Officer until I have clear proof that the man is a consumer. None of these men have been reported; for, though I believe from their conduct that they are consumers, I have no clear proof of it, and have never seen any of them smoke. We have defaulters' sheets of men who have been punished in any way. The name of ganja smokers would not be entered in the defaulters' sheets unless they are punished for some offence.

If I saw a man smoking ganja I should at once have him arrested and report him to the Commanding Officer. I have never had to do this in any case since I have held a commission, nor have I ever had occasion in my service to arrest a man for this. I had a case a few months ago, but it was a case of opium. The drug was found in the man's kit. Under the Articles of War there is a strict prohibition against using any kind of intoxicants. And any man who takes drugs at all is liable to arrest and to dismissal from the service. There is no order against ganja other than is against liquor; there is a general order against the use of intoxicants, and a man who touches ganja or spirits is liable to disobedience to orders.

There is only one man, a Hindu, in my company whom I have had to talk to about such matters. They are dealt with by company officers. I told

him that I had heard he smoked. He denied it and took oath of his caste. He is a young man. I told him his carelessness in duty showed him to be a smoker. He again denied it. He has appeared in the defaulters' sheet for neglect of duty. There are two or three such smokers in my company. But I have only spoken to this one; and I have no proof against him. If there is any fight or theft or other such offence and I hear of it, I make an inquiry, calling witnesses, and have the man punished. If I heard an equally definite complaint that a man had smoked ganja, I should take the same course. Such a case has never occurred in my experience. No open smoking has ever occurred. All I know about the thirty or forty men I have mentioned is that I have heard that it is believed that they smoke secretly in their houses. There is no evidence available.

Question 51.—This statement about the children of smokers being puny is not based on regimental experience, but on what I have noticed of the children of fakirs and other poor people who smoke. Of course, I have never made any special inquiry; but this is my impression.

In our regiment we have only four Kahars or Bhoois attached to the hospital. But on service we had Kahars, Hindustanis, to the number of 40 or 50 at a time. They were generally consumers of the drugs. I never saw any deterioration in their work from taking ganja, but the consumer who was accustomed to the drug could not work without it; he seemed unfit for work. They have very heavy work.

Question 53.—No case of murder from drugs has ever happened in my regiment. But I remember that a case occurred in Bangalore in 1885 in the 12th Madras Infantry, in which a sepoy named Ramkistama shot the Jamadar, Adjutant, and Drill Havildar of his regiment. The men of the 12th said he was a great ganja smoker. He was hanged. There was no enmity, but great friendship between the sepoy and the Jamadar in this case. I heard of another case which occurred a year later in the same regiment, in which a Jamadar shot the Subadar with a revolver and then his wife and then himself. I asked about the matter, and heard that the Jamadar had been a ganja smoker, and also that there had been great enmity between him and the Subadar.

I remember also a case of a bairagi who committed suicide by thrusting his tongs into his throat. I was playing near at the time. He was a ganja smoker. This was in 1866 at Ho-shangabad when I was a boy with my father, who served in this regiment. People said he was a ganja smoker, and saw him smoke. I know that bairagis also use dhatura, but that was not mentioned.

Besides these three cases I have never myself known any case of the connection of hemp drugs with such crimes. I have never seen any other such case. I have been told of such cases occurring in other places.

Question 54.—My answer here is purely based on hearsay. I have never seen such a case.

Question 55.—My answer here is based on hearsay. I have never seen such a case, except that I can recall the case of a man in my regiment in 1868 or 1869, who was said to have given his wife majum and made her insensible, and then cut her throat through jealousy. It was at Kamptee. I remember the murder. I was in the regiment.

83. Evidence of SURGEON MAJOR-GENERAL W. F. DEFABECK, *Surgeon-General with the Government of Madras.*

Oral evidence.

Question 1.—I am Surgeon-General with the Government of Madras. I have served in this presidency and Burma since 1857. All but twelve years in Burma and three years at home have been passed in the presidency. When asked to furnish the names of medical officers in this presidency who would be competent witnesses regarding the hemp drugs, I omitted my own name, because, though I would willingly have given evidence, I felt that I was not able to offer a sufficient amount of evidence from independent observation.

Question 45.—My experience is that it is a very rare thing to meet with any case in which the hemp drug has caused evil effects on the health of the population. Apart from insanity, no evil effects have been brought to my notice. The statistics of the three lunatic asylums in the presidency show the connection between the hemp drugs and insanity. As to whether these statistics are trustworthy, I should rely entirely on the opinion of the medical officers in charge of the asylums, with the exception of certain district officers. Other information gathered from the Police or other lay sources I would not accept as reliable. The statistics of the lunatic asylums are, as I understand, based on professional opinions. And these opinions are based on the medical officers' observations in the asylums, the facts furnished by insanes in lucid intervals, and the statements of friends and relatives of the insanes. The medical officer might get at the information regarding the hemp drug habit in the same way as he might ascertain whether the insanity was due to loss of money or friends, disappointment in love, or quarrels, so he might find that he had the habit of charas or ganja smoking. I have never had charge of a lunatic asylum. The practice which I have described relative to the enquiry as to cause of insanity is the practice which I know to be followed by the Superintendents of Asylums. In each case in which the cause of insanity is given in the returns furnished to me, I accept

that cause as based on sufficient data. In cases where the Superintendent himself has had no opportunity of examining the friends or relatives of an insane, and the cause is entered on information furnished by the Civil Surgeon, the certifying officer, I should consider the statement of cause reliable, if the Civil Surgeon had had the case under observation long enough. Where the Civil Surgeon had no information, and the cause was entered on information furnished by the district officer, I should think the statement of cause decidedly reliable in some cases. In the last category a reliable case would be one in which a European officer certified the cause from personal observation or enquiry conducted by himself in person. I should think a European district officer would be well acquainted with the products of his district, and the drugs of the country, and would therefore be able to form a reliable opinion on the effects of the hemp drugs in any given case. That is the reason why I issued a circular to Superintendents of Asylums, directing that when Form C did not mention the cause of insanity they should apply to District Magistrates for that information. I should say that a Superintendent who considered himself bound to accept the cause given in Form C, and to enter it in his Register and annual statement VII as the cause of insanity, was labouring under a misapprehension. If I found that the entries in statement VII were based on Form C, I should not regard them as reliable; they might be correct, but they would require corroborative evidence. If I found further that the enquiry in regard to cause was never made by the district officer, but by a Subordinate Magistrate or through the Police, I should regard the cause assigned as much less reliable. As Surgeon General I have had no opportunity of making enquiry regarding causation apart from the statistics supplied to me. Diagnosis of hemp drug insanity does not depend solely on history. I consider that it is the duty of the medical officer to observe the case, and base his diagnosis on the facts he observes, and those he may elicit from the insane in lucid intervals.

84. Evidence of SURGEON-LIEUTENANT-COLONEL S. L. DOBIE, *Principal Medical Storekeeper, Madras.*

Oral evidence.

Question 1.—I am Principal Medical Storekeeper, Madras. I have been over twenty-one years in the service, entirely in this presidency except when on service. I have been four years in all in charge of the Madras Lunatic Asylum (three years and then one). I had an appointment in the Hampshire Asylum before I came out for two months; and in a large private asylum in London for seven months in 1877. I have no other special experience of lunacy. I cannot refer the Commission to any literature on the subject of hemp drug insanity. I have never made any *post-mortem* examinations of brains, nor can I refer to any showing whether tissue changes are found in cases of hemp drug insanity.

Question 45.—I put in printed copies of my letters to Dr. Warden of 6th and 20th October 1893. I adhere to the views therein expressed as

to the generally untrustworthy character of the statements of Medical Officers, Medical Subordinates and Magistrates, as to the cause of insanity (*vide* letter of 6th October). As to my letter of 20th October, by saying that "I am responsible" for the entries as to cause, I mean that I did not leave the entry of cause to be made from Form C by subordinates. Whether I wrote it myself or not I was responsible that the cause entered was what I myself decided to be the cause, and not merely what was entered in the papers. In my letter of 6th October I say that "I must assure myself that the cause has been entered in my own handwriting." When I got to the asylum, I found that it had not been entered in my handwriting in the general register, but in another book (in an index) in pencil by me: an index in which names are entered as patients come in. I thought I had entered it also in the case book, but I had not done so in all cases I find. I find some such

entries. My "reasonable belief" as to cause was based on reading the papers and seeing whether they showed a probable cause of insanity, and on inquiry from the lunatic. I see the case of Kamil Sahib shows him as having shown no signs of improvement and as having nothing ascertainable as to history. The case book shows nothing. I must have found out from him, I suppose. I must have found that he took ganja. I presume that if a man in his state said he took ganja it would just be as reliable as if he were sane.

I know nothing at all about what would be the moderate or immoderate use of the drugs. The admission of the habit was therefore as a rule quite sufficient for my purpose.

I have no knowledge whatever of the extent to which the drug is used.

There are not, I think, any typical symptoms of hemp drug insanity. I really do not know any typical symptoms. These cases are mostly cases of acute mania. If I had a case of acute mania

and the admission of the ganja habit, and other causes were unknown, I should have no hesitation in ascribing the insanity to hemp drugs. Causes are nearly always unknown as a matter of fact. That is, people enter causes readily enough; and ganja is frequently entered. Ganja has a bad name, and when people find a lunatic takes ganja they stick it down. But trustworthy statements as to cause are generally wanting. In cases where I find an alcoholic habit I should assign the insanity to alcohol if I could reasonably do so. That is I should do so in the absence of any other cause; for alcohol is a most notable cause of insanity. Case No. 11 of the 1892 cases is one which might be ascribed to either ganja or alcohol. In the case of alcohol I should of course discriminate between the moderate and excessive use. In the case of ganja I could not. It is much easier for a European to judge of alcoholism than of drugs. I therefore feel very little confidence in the diagnosis I have made, ascribing these cases to hemp drugs.

85. Evidence of SURGEON-MAJOR W. G. KING, *Acting Sanitary Commissioner, Madras.*

1. I have been in medical practice in the Army and Civil Medical Departments of the Madras Presidency for nearly twenty years.

2. I believe the term "charas" would not be generally recognized in this presidency. The flower tops alone seem to be employed, and decoctions made from them are mixed with other substances; where flower tops would be inconvenient, ganja and bhang alone seem applied.

29. The flower tops are usually sold mixed with tobacco for chewing in small packets.

30. It is usually practised in company. A group of men will pass round the special pipe on which with gourak a small quantity of ganja decoction has been mixed. The smoking is on these occasions not carried to an extent to cause more than slight exaltation. In large populations, but few will be found who indulge to an extent to secure the full effects. These resort to ganja dens, where both men and women are found.

31. I think large numbers indulge at intervals without forming the ganja habit. Only the naturally vicious part of the population take to the habit permanently. The old profligate is the most likely victim.

36. The two cases have in practice scarcely any relation to each other.

39. The eating or drinking of any form of the drug necessarily is the more likely method of producing full effects than by smoking. In my opinion there can be no doubt numbers of natives are rendered lunatics by use of the drug, who would never have become mentally deranged failing the use of this powerful disturbant of the nervous system.

40. Native doctors prescribe it largely as an aphrodisiac, and slightly as an anodyne.

41. (a) No.

(b) Yes. But only in the sense that it is a stimulant. The system would suffer for the energy displayed.

(c) No.

(d) I know nothing good of the drug, when given otherwise than in medicinal doses.

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42. No. I believe the moderate use of ganja, if habitual and used otherwise than to gain a specific result therapeutically, to be harmful.

44. The perceptive faculties are excited and perverted. The obedient servant of half an hour before is converted into an impudent, self-asserting, and unreasoning rascal.

45. (a) In moderate doses the physique is not impaired, but the perceptive and moral faculties degenerate.

(b) and (c) No.

(d) In the habitual smoker bronchitis is frequent.

(e) Yes; it impairs the moral sense, induces laziness, immorality and debauchery.

(f) As to exciting cause, etc., *vide* answer No. 39. Insanity following use of ganja is, in a larger number of cases than those of ordinary type, curable. Insanity is usually induced by a relapse of the habit.

(g) Cases certainly occur where the drug is taken to assuage anxiety, but they are so rare that the effect on the total is not worth taking into consideration.

Whilst admitting insanity may induce its use, I think the usual history is that the debauchee, a man deficient in mental control, takes ganja till he becomes insane, as a result of constant and undue excitation of the nervous system.

46. The mental faculties of the man who is addicted to the use of the drug to excess are always impaired, and it becomes rather a question in considering such cases as to what is insanity and what not. The action of the drug in relation to insanity I believe simply to be wearing out of that part of the nervous system supplying imaginative faculties by over-excitation, the action being on a par with the induction of more or less complete impotence by over-excitation of the sexual organs.

47. I should think it is never hereditary, and that moderate use does not affect the children of the moderate consumer.

50. It is administered by prostitutes in excessive doses, and its use is a frequent cause of impotence. I have known a case of absolute

impotence of long duration result from excessive excitation following a single administration.

56. In every bazar through all hours of the night majum is sold for the use of prostitutes and their devotees. This is a sweetmeat made with a decoction of the flower tops.

In conclusion, I consider restriction of the sale of ganja under conditions similar to those required for poisonous drugs in Great Britain, would be an unqualified blessing to the country; thus contrasting with action taken against opium, which agitation I believe to be unnecessary and mischievous. I consider special measures should be taken to restrain the use of ganja by sepoy, and especially to prevent the young sepoy from acquiring the habit.

Oral evidence.

Question 1.—I have served sixteen years in the Civil Department. I was Superintendent of the Lunatic Asylum at Madras for about six months. I have had no special training or experience in lunacy in England.

Question 31.—Only the part of the population which is naturally vicious takes to ganja. I do not see anything inconsistent in my answer 31 with my answer 45 in regard to the effect of the drug in inducing immorality.

Question 45.—I refer to the habitual or continued moderate use when stating that the drug impairs the moral sense, and induces laziness, immorality, and debauchery. The portion of my answer relating to insanity, including the reference to answer 39, contemplates the excessive use. I have known the moderate use in cases of sepoy and one private servant. I have seen sepoy smoking ganja in the lines, and known from hearsay that it was ganja they were smoking. Besides the above direct observation, I have derived general impressions. My opinion of the effect of the moderate use in impairing the moral sense and inducing laziness, etc., is a general impression and not based on actual observation. I could not say that the cases of the sepoy presented these effects. My general impression is based upon the fact that persons alleged to have been ganja smokers have presented these characteristics; but I have not specially enquired into the truth of the allegation that they were ganja smokers. They were pointed out as notorious ganja smokers. I did not discriminate in these cases between the moderate and excessive use, because I was not called upon to do so. Though I have not made the matter one for special enquiry, still I am decidedly of opinion, from general observation during my service, that the moderate use of the drug leads to laziness and debauchery. These effects can be produced by other causes. A vicious life will produce them.

Question 46.—The physical effects of moderate smoking vary with the constitution of the smoker. A man of about 35 years of age, who said he had smoked from five years of age and is now an immoderate smoker, showed no physical deterioration. Another man of about 55 who took to the habit at 30 or 35 is now a wreck. The conclusion I draw from these cases is that the results will differ with the constitution of the persons concerned. I refer here to the immoderate use, which may in one case induce no symptoms, and shew very evident effects in another. I should say the same of opium. Speaking generally, the immoder-

ate use of the opium does induce certain symptoms. Ganja also used immoderately induces specific symptoms. The immunity in one of the cases described above is due to the man's power of resisting the drugs; but the normal tendency of the drug is to cause deterioration. I base my explanation in regard to these two cases on my general experience of the excessive use of the drug and not upon the two cases alone.

My general experience of the effects of excessive use is based on cases in the lunatic asylum, and also upon observations among the class of fakirs and bairagis who use the drug largely in the course of my dispensary practice. I have seen large numbers of such persons in my hospital practice as well as during my inspections of towns. In the latter case the men were, of course, not under my treatment; but I must have conversed with such persons. I have also had a private patient who had the drug administered to him in an excessive dose. This is the case mentioned under question 50. This is the extent of my experience. I understand by immoderate use, use for the purpose of intoxication. By intoxication, I mean the exhilaration, which is all the intoxication that can be got by an immoderate consumer. I regard the use as immoderate in every case in which it is not medicinal. There are moderate consumers who smoke for the purpose of exhilaration in the ordinary sense, which is a different thing from the exhilaration of the immoderate smoker.

As regards insanity induced by the drugs, I allude to cases I have seen in the asylum. I have no doubt had to deal with other cases; but I cannot recall any of them. I believe the hemp drugs to be the exciting and not the predisposing cause of insanity. The insanies I have seen have come from the classes of sepoy and bairagis. Bairagis live poorly; but I do not know anything of their character as a class. There are no characteristic symptoms of hemp drug insanity. All the symptoms which occur in such cases may be due to other causes. The diagnosis is based purely on history. I should not necessarily ascribe the insanity to hemp drugs, because the insane's history shewed the hemp drug habit. I should select the cause which appeared in the history to be most prominent. The histories as given by natives are fairly reliable if they allege ganja; they would not be able to differentiate other causes so readily. If heredity appeared in a history and the ganja habit as well, I should ascribe the insanity to heredity as the predisposing cause and to ganja as the exciting cause. I believe that such a case would appear in an asylum register under the head of "Toxic insanity" under ganja. I cannot remember the number of insane cases in the asylum due to ganja when I was in charge, nor the number of relapses. I have no instance of relapses of insanity due to relapse into the ganja habit. By "wearing out" in question 46, I mean that the nervous system requires rest for correct nutrition, and in the presence of over-stimulation this nutrition cannot be secured. The case is not exactly analogous to that of alcohol, because in the case of alcohol I believe you will have, besides effects of over-stimulation, physical changes produced in the nerve tissue, whereas in the case of ganja you will not, as far as I know, have such changes. I can give no reference to a *post-mortem* examination of a ganja consumer in which any tissue change in the brain has been recognized. My statement regarding the absence of change in nerve tissue is merely my

impression, gathered from the fact that my attention has never been arrested by any such change in such an examination.

Question 50.—The case was that of a Muhammadan, to whom the drug was administered by a dancing girl in the form of a sweetmeat, and who told me that he had been impotent ever since. I saw him three or four months after the administration of the drug. He was fully six months under my observation, and consulted me, though I did not prescribe for him. He was not a patient. He merely stated the fact of his condition. My

reply to question 30 regarding absolute and permanent impotence is based on his statement. The word "permanent" may be withdrawn, as my observation may not have been sufficiently long. The statement as to the cause of impotence is based solely on the man's statement. I made no enquiry or examination. The proximate cause of impotence was, in my opinion, the excitation induced by the drug, and not the direct action of the drug itself. He said he had never taken the drug before.

86. Evidence of SURGEON-LIEUTENANT-COLONEL H. HYDE, *District Surgeon, Trichinopoly.*

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| <p>1. Very few.</p> <p>2. Yes. Only flat ganja is obtainable in Trichinopoly.</p> <p>3. Is largely grown, I believe, in Mysore.</p> <p>4, 5 and 6. No information.</p> <p>7. No, except a few plants grown near mosques, etc., for medicine.</p> <p>8. None.</p> <p>11, 12 and 13. No information.</p> <p>14. No.</p> <p>15 and 16. No information.</p> <p>17. By no particular class.</p> <p>18. No information.</p> <p>19. Ganja only is used for smoking.</p> <p>20. Ganja only is used for smoking by all castes alike.</p> <p>21. Flat only is used here.</p> <p>22. Not used.</p> <p>23. No.</p> <p>24. Used only occasionally, not in any particular locality.</p> <p>25. Ganja smoking appears to be on the increase judging from the amount sold.</p> <p>26, 27 and 28. No information.</p> <p>29. No information. I know of no preparation such as bhang massala.</p> <p>30. Confined to male sex. It is given to children at time of circumcision.</p> <p>31. (a) and (b). The habit of ganja smoking is easily formed and difficult to break off.</p> <p>(c) Not so far as I have any information.</p> <p>32. No information.</p> <p>33. Ganja smoking is generally regarded with disfavour.</p> | <p>34. No information.</p> <p>35. Am not competent to form any opinion.</p> <p>36. Not so far as I know.</p> <p>37. No information.</p> <p>38. Only flat ganja is procurable in this district.</p> <p>39. No, they both have the same effect.</p> <p>40. No information.</p> <p>41. Ganja is said to aid digestion.</p> <p>42. The moderate use of ganja is harmless as far as I know.</p> <p>43. Yes.</p> <p>44. Said to be refreshing and to produce intoxication and to create appetite. The effects last for about a couple of hours.</p> <p>45. (a) Not as far as I know.</p> <p>(c) Said to create appetite.</p> <p>(d) No.</p> <p>(e) Cannot say.</p> <p>(f) No information.</p> <p>46. No information.</p> <p>47. Not as far as I know.</p> <p>49. No information.</p> <p>51. No information.</p> <p>56 to 59. No information.</p> <p>60. Not grown here.</p> <p>61. Not used here.</p> <p>62 and 63. Am not competent to give an opinion.</p> <p>64. No information.</p> <p>68. Not as far as I know.</p> <p>69. Ganja is sold in the public bazar.</p> <p>70. No.</p> |
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87. Evidence of SURGEON-LIEUTENANT-COLONEL A. H. LEAPINGWELL, *District Surgeon, Vizagapatam.*

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| <p>1. To ascertain what varieties of ganja are used in this district, I visited the shop of the only man licensed to sell ganja in this town.</p> <p>2. Charas not known here. Flat ganja and broken ganja are met with here. The broken ganja is here known as bhang.</p> <p>19. Ganja is sometimes mixed with milk, cardamoms and spices as a drink. It is also used in the form of an extract in the treatment of dysentery and cough. While I was in the shop of the</p> | <p>seller making inquiries (about two hours), four persons came to purchase it for sick children.</p> <p>23. Not used for smoking.</p> <p>28. (a) About 50—60 graius, price 4 pies, (b) about $\frac{1}{2}$ to $\frac{3}{4}$ ounce.</p> <p>29. (a) Tobacco. (b) Opium. I am told that if tobacco is not used with it, cough is produced. Opium is added to produce greater intoxication. Bhang massala is occasionally used. It is said to be composed of coriander, poppy seeds, aniseed,</p> |
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black pepper, cinnamon, cardamoms, sugar and milk.

30. Generally in company, confined to male sex. They are given as medicine to children.

40. An extract and powder mixed with many other ingredients are used in dysentery, bronchitis and some other diseases. Said to be used to tame elephants and horses.

42. There are at present in this district jail 14 men, out of a population of 180, who admit that they smoke ganja. All are in excellent health.

45. Seven males out of 33 in the Waltair Asylum are said to have been ganja smokers.

49. Said to be an aphrodisiac in small doses. Used by bairagis to produce impotence.

Oral evidence.

Question 1.—I have been twenty years in India in the service. I was in charge of the Lunatic Asylum at Madras for over two years, and have been in charge of the Waltair Asylum since April 1892. At home I was for four months Assistant at the Somerset County Asylum. Apart from that, I have had no special experience or training in insanity. I have had charge of several jails as Civil Surgeon. I am now in charge of the jail here.

Question 27.—I have made an inquiry into the use of hemp by the prisoners in the jail here. I asked the Hospital Assistant and Jailor to find out what men admitted the use of the drugs. I thought the prisoners would be more ready to tell the native officials in the first instance about their habits. I then questioned each apart. I was surprised to find how willingly the prisoners admitted the use. There was no difficulty whatever. I found 18 cases in a male population of 191. Of these, 4 had the habit of using other intoxicants as well, and 14 admitted the ganja habit only. Yesterday there were 11, 3 with the confessed double habit, in a male population of 151. All the men admitted before me quite readily. I have never been asked for ganja by a prisoner; but I have been repeatedly asked for opium by those who use that drug. I do not think that the failure to ask for ganja is due to any shame, for these 18 evinced no such feeling. I know of no reason why they should not ask for it. Some opium eaters have been discovered who have never asked for the drug; but some confirmed opium eaters give great trouble. I conclude that the ganja habit can be much more easily broken. I have had charge of jails for the last eleven years almost continuously.

Of the 11 cases seen yesterday all but one are cases of offences against property. That one is a case of causing grievous hurt; but the Judge states in his judgment that the offence was committed while the men were drunk. The record shows that they had drunk toddy at a feast. I see nothing whatever to connect the crimes in any of these cases with the ganja habit. Several are old offenders, and all these told me that their first offences were committed before they took to ganja.

I asked all these criminals as to how much they used. They all denied becoming silly or senseless from ganja. None of them admitted taking ganja to excess. I used to think I could pick out an opium smoker by his appearance; but recent inquiries have shown me that there are men of perfectly healthy appearance who confess to the habit. As to ganja, it was never brought to my notice at all. So far as I am aware, there is nothing special about the ganja smoker's physical

appearance. Before I received the questions issued by the Commission I paid no attention to ganja. I did not know it was a general habit to use ganja. I had heard it was used in the hills, but did not know it was used here. I had, of course, no idea as to what would be moderate or excessive use.

Question 29.—My statement that opium is added to produce greater intoxication is based on information given me by the Vizagapatam ganja vendor. I visited the shop and made inquiries from him. I did not gather that the mixture of the two drugs was general. One or two prisoners said they ate a little opium and then smoked their ganja. I do not know why this is done.

I remember the case of the lunatic Kolagana Ramamurti. I had had communication with the Rev. Mr. Laflamme about the case. I felt the man should not be released without having some one to look after him. I remember that Mr. Laflamme came in answer to my letter and spoke to me about the blow on the head. I told him I did not think that the blow could have been the cause of insanity. I thought the evil treatment by his relatives had more to do with it. I had also heard that the man took liquor. I was concerned in telling Mr. Laflamme that the blow on the head was not the probable cause of insanity as he asked me that. I may have mentioned the other possible causes. I have no recollection of mentioning ganja. I do not think I could have given that as the cause. The papers have no reference to ganja; but they are clear on liquor drinking. At the time I attributed the insanity to the treatment the man had received on becoming a Christian. He was always asking for his wife and child. I have a recollection also of telling the missionary that the man was not quite a good character, but took liquor. I thought it probable the missionary did not know this. I remember mentioning it, as the Hospital Assistant had told me of it. If I had been told about ganja, I should have mentioned that. I see the papers have no reference to ganja. The reference to liquor drinking is in Form C, signed by the Head Assistant Magistrate.

Question 45.—In cases sent to me as Civil Surgeon for observation, and also in cases sent to me as Superintendent of the Asylum, I receive information in Form C from the Magistrate. This is based on inquiries made by him. I have to accept this, as I have not, except in cases of residents in the town, opportunities for making the inquiries. Frequently the entries regarding cause, occupation, etc., used to be unknown. But Government have issued an order that every effort should be made to obtain information. The Government were dissatisfied with the defective character of the information given and the number of cases in which the cause was unknown. We often send back cases accordingly to the Magistrate when the cause is not given or information is otherwise defective.

As a rule, we accept what the Magistrate assigns as the cause. We should enter "grief" or "liquor" or "ganja" according as the Magistrate had entered it. We presume that he has made inquiry. Even when an entry had been made by the Magistrate, I should send for the relatives if in the town if there was any point on which I wanted more information. I have done so in one or two cases where the Magistrate had shown a cause, because I wanted to look into heredity. Even in the very rare case of relatives coming with a lunatic, I should not make any inquiry from them unless there was a point on

which I specially desired information. Thus, if the entry regarding hereditary history were blank, I should take every opportunity that offered of inquiring into it, because the chance of recovery depends so much on heredity.

As a rule, and subject to these exceptions, the entries are copied at once into the general register from the Magistrate's papers. If I found a more probable cause than that assigned by the Magistrate, I should alter the entry. I do not remember ever altering an entry in this Asylum. But I remember making such an alteration several times in Madras. I remember specially the case of a Eurasian who had hereditary taint in the Madras Asylum. But it is much more difficult to get such information in the case of a native; if any one could get it.

I remember getting information from an old woman (mother or grandmother) of the lunatic P. Narasimham, admitted in 1892, that the patient's grandfather was insane. I think it would have been more valuable to have shown that as a case of heredity than of ganja insanity; but I observe that the latter entry has not been altered in the register. The point, of course, is chiefly one of personal interest to me in the treatment of the case. An entry was made on the papers. I omitted to alter the register. At the same time I think that the register should have been altered, as the question of recoveries from certain types is important.

I do not think that the entries in the Form C as to cause are reliable. The relatives are not generally able to give valuable information, and the Magistrates who get the information are not able to judge what is valuable information. I might illustrate this by saying that it is not unusual to find that a lunatic who comes in with cause "unknown" or some other cause assigned is an epileptic. Epilepsy is most important as a cause and also in relation to cure. I think also that

if a Magistrate hears any mention of ganja the cause goes down as ganja. I do not, therefore, think that Statement VII appended to the annual report can be regarded as at all a satisfactory basis on which to rest any conclusion as to the connection between hemp drugs and insanity.

I have not given any replies in my paper to questions 45 and 46 as to the effects of hemp drugs, because I do not know them. I have failed to observe any physical signs in those who use the drugs. While in charge of the Madras Asylum, I endeavoured to ascertain typical symptoms of hemp drug insanity, but failed. I have said that I place little reliance on the cause of insanity as assigned by the Magistrate. I should say that the diagnosis of hemp drug insanity in any case must be based solely on cause. By that I mean that without a history of the drug there can be no such diagnosis. I attach specially little weight to the allegation of ganja as a cause in Form C, because there is a popular idea that ganja causes insanity, and if the Magistrate heard of ganja he would probably enter it at once. I should myself have put down ganja as the cause of insanity in any case where I examined the friends, if they merely said the man used ganja and I could get no other cause, as I did not discriminate between the excessive and moderate use. I should go much more carefully into the matter now, since I have, in the course of the present inquiry, learned so much more about the use of the drugs.

Question 45.—Explanation.—The Hospital Assistant informed me that each of these seven men smoked tobacco in a way that indicated that he was a ganja smoker. There were, therefore, seven men who were ganja smokers; but I did not mean to say that the insanity in these seven cases was due to ganja. There are only three patients now in the asylum who are shown in the registers as having their insanity due to hemp drugs.

88. Evidence of SURGEON-MAJOR CHATTERJEE, Medical Officer in charge 13th Madras Infantry, Cannanore.

14. They are not grown here, but I have seen them grown largely in Lower Bengal, where I gained my experience in these drugs. In almost every house where Hindustanis are employed, a patch of ground near the servants' quarters is cultivated and ganja plants are grown. These plants are chiefly used for making bhang from the green leaves.

15. The ganja usually sold in the bazars comes from up-country, Lucknow and Delhi. The wild plant is said to be of little or no use. Ganja is the dried flowering tops of the female plant *Cannabis sativa*, natural order *Urticæ*, sub-order *Cannabinaceæ*. A little of the top, about an inch, is broken off; the seeds and stalks are thrown away, and the rest made into a hard paste with a little water well rubbed in the palm of the left hand by the right thumb. This is put in an earthen chillum and smoked either through a hukka or between the palms of the hands.

Charas is or ought to be only the resinous exudation of the hemp plant, but it is seldom or never pure. It is smoked with goorakoo or tobacco and treacle paste; usually smoked by natives. It is not very strong in action, perhaps owing to its being seldom what it pretends to be.

Bhang is the larger leaves and capsules of the hemp plant. It is made from the green plant, and often the people who use them make up a large number of balls and dry them in the sun for future use. Bhang is prepared in the following way: The green leaves, sometimes even the tender stalks and capsules, are ground into a stiff paste in a stone mortar with a wooden pestle. To make it more intoxicating a few seeds of dhatura are often added. When the paste is smooth it is made into a drink by the addition of milk, water, sugar, etc., according to fancy. An ordinary dose is a teacupful, but often a quart is taken by a seasoned vessel.

There is one very important preparation of the Indian hemp which is not mentioned in these questions. I mean majum, a kind of sweetmeat, composed of bhang, ghee, sugar and spices. The ingredients, at least their exact proportions, are a secret of the trade, as it is said in Calcutta that only one man could prepare the majum properly in the whole of India; that man lives at Delhi, from where the best majum comes. This is the only preparation which is often eaten by comparatively well-educated people of the better class owing to its aphrodisiac properties. Before going to bed a

person usually takes about 8 grains or a pill about as large as a good-sized pea and gradually swallows it.

16. Bhang is almost invariably prepared by the people in their houses. It can be prepared from the hemp plant wherever grown. Ganja and charas are difficult to prepare; at least I never knew that any one smoked either of them, home-grown or home prepared.

17. All these and especially ganja are smoked in Bengal by the very lowest of the low. Bhang is sometimes used by the better class people. Majum by a great many well-to-do people for its aphrodisiac properties.

18. They deteriorate by keeping, especially if not kept quite dry. Ganja will keep three years if kept quite dry; but these are never so strong as when new or the current year's growth. They deteriorate by a kind of fermentation I think.

19. Ganja is smoked by itself. Charas is smoked with tobacco. I know of no other use they are put to.

20. I have said before that only low class people smoke them, but I don't know what is their proportion.

21. The Bengalis prefer the round kind.

22. Delhi charas is supposed to be the best.

23. Bhang is never smoked.

24. The darwan classes in Bengal drink bhang almost exclusively.

25 and 26. I don't know.

28. A moderate ganja smoker takes a couple of chillums of an evening. An excessive consumer smokes a chillum as soon as he begins to find himself free from its effects.

29. Ordinarily spices, such as black pepper, etc., are mixed; exceptionally dhatura, etc., to make the drink stronger. These mixtures only refer to bhang for drinking purposes. I don't know of any preparation such as bhang massala.

30. They are either smoked or drunk in solitude or in the company of those who use them. Adult males only use them. Children sometimes get hold of a pipe. I did once as a child, and was sick for some hours afterwards.

31. There is a tendency in the case of ganja for the moderate habit of smoking to develop into the excessive.

32. The followers of Siva generally smoke ganja, but the religious connection is remote.

33. The only public opinion that I know of is that a ganja smoker is considered to be a low vagabond, simply because most ganja smokers are low people. They don't worship the ganja plant.

34. To a habitual smoker it would be a serious privation for a time only.

35. It would be feasible to prohibit the use of all these drugs only partially, as ganja at least would be smoked illicitly as now done by some sepoys, though they are not allowed to do so. I don't think it would lead to any political danger. Alcoholic stimulants may take the place of ganja.

36. I have reason to think that alcoholic stimulants are taking the place of ganja, chiefly because the moderate use of alcohol is not considered a low practice. Most syces in Upper India formerly smoked ganja, but now they drink arrack or toddy.

37. The number of charas smokers is not large,

at least I have not met many. The effects are not so marked. It is only a mild intoxicant, and its effects are not lasting.

38. I don't know.

39. I believe the smoking of ganja is the worst of all. Drinking bhang and eating majum are not so deleterious.

40. I don't know if any of these are used for cattle disease, but ganja in some shape or other is prescribed by native hakims for its aphrodisiac effects.

41. These drugs, especially ganja as a smoke, are never used except as intoxicants. Majum, as I have said before, is often used by many well-to-do people in Upper India as medicine (aphrodisiac); and then it is used in moderation and not as an intoxicant.

42. I cannot consider its use as harmless.

43. I don't think so.

44. The immediate effect is intoxication. The man generally is drowsy and goes off to sleep. It may be refreshing. Sometimes it excites the smoker. It deadens appetite. The effects last usually an hour or two in the case of a habitual smoker, but it is difficult to answer this.

45. It generally makes a man thin and his eyes bloodshot. He sometimes becomes insane from its constant and immoderate smoking. It does not produce any particular disease except a peculiar cough, the result of a kind of chronic bronchial catarrh. The insanity that is produced by ganja may be temporary or permanent according to the previous habits of the smoker. If the man had been a smoker for a few months only before the insanity appears, there is a chance of his recovering. In the case of an old ganja smoker becoming insane, the insanity is almost sure to be permanent. I don't understand the latter part of the question.

47. I don't think so.

49. Yes. But I don't think that prostitutes ever use it. I never knew a case where it was the cause of impotence.

53. I know of only one such case. A sepoy who was a ganja smoker and majum eater ran amok in Burma.

55. I don't think ganja or any of its preparations are ever used for this purpose.

56. As I have said before, dhatura is mixed with bhang to make the drink a more powerful intoxicant.

57. I don't know if ganja or charas is ever drunk.

Oral evidence.

Question 1.—I have been nearly seventeen years in the service: nearly all military service. I am in charge of the 13th Madras Infantry, and am also temporarily acting as Civil Surgeon of Cananore in addition to my own duty. My service has been confined to Madras presidency (including Burma). I have had no special experience of insanity, nor any special training in mental diseases.

Question 15.—Bhang is used in the festival of Shiva, and Shiva is connected with dhatura somehow or other. I do not know how. For this reason one seed of dhatura is used in the bhang as an act of reverence to Shiva. This is the custom in some parts of Bengal. But the addition of dhatura for increased intoxication is only exceptional. When they want to increase intoxication, they often use

dbatura, not alcohol; but, as I say, this use is itself exceptional, not frequent. I cannot say how the seed is added. I have myself drunk some bhang with dhatura mixed. I took it on a bet to see the effect, when we saw it prepared by some durwans when I was a student. I did not know what I was doing for some time. I had to go to bed. I remember a sort of dual personality coming over me. I felt myself (I remember, though it is twenty-five or thirty years ago) in an egg. A servant opening the door broke it. I did not notice any change of vision. I was about 14 or 15 only, and incapable of observing physiological symptoms.

Question 45.—What I have said here is based on personal experience of sepoys who are smokers, though they would not acknowledge it, as it is contrary to military orders. I could almost spot a man who was a confirmed smoker. As a professional man, I cannot say I am sure. I know that the opinion of skilful men is opposed to this view; but I am morally certain that I could spot a man who had long smoked immoderately.

One case of ganja smoking I watched since I joined the 13th Regiment in 1882 until the other day. Up to 1892 he never smoked immoderately. There was no physical or mental deterioration until 1892. In 1892 he went on leave and lost some relations from cholera. He then took to immoderate smoking, which resulted in madness; so that when he returned from his furlough he was a raving maniac. He had six months' furlough and overstayed his leave. When arrested he was a raving maniac, violent, obstreperous. The man never said he was a ganja smoker, but he asked for ganja in hospital. In this man's case I put down the cause as "the sudden loss of relations and probably ganja smoking." He did not become mad under my observation, so I could not know the actual cause. We have to give a cause if possible. This man was sent to the Madras Lunatic Asylum.

The second man was also sent to the Madras Lunatic Asylum. The case contained the entry that the disease "was due to his own imprudence." There was no entry whatever in the whole case in any of the papers of the use of hemp drugs. Because it could not be proved, and as it is an offence to use ganja, we did not mention it. The only thing that connects the case with ganja is that the man when insane asked for it. The Deputy Surgeon General did not think that sufficient; for he said: "Would you put down ganja as the cause of madness because the madman asks for it? Would you put liquor as the cause if he asked for liquor?" I would. But we did not enter ganja as the cause. I knew nothing of the man's smoking

ganja before he became mad. I never saw him smoking, and there was no evidence that he did so.

These are the only two cases that have ever come before me in the course of my experience where a man became insane and the insanity was attributable to ganja smoking. There is no proof in either of these cases except the man's own admission, and when a man is out of his mind, I do not think his statement is worth much.

With the exception of these two cases, I have observed no other physical effects on the sepoys under my charge which I could attribute to ganja, in any particular case. I cannot, in the case of any sepoy, attribute thinness or cough to ganja, for I cannot be certain. I have no proof; and I could not charge a man with ganja smoking without proof, for it is a military offence. What I have said in my written answer about thinness and cough is my impression; but I could not assert it about any particular case. The thinness might be due to underfeeding, which is also a common offence among sepoys, and is difficult to prove. But the bloodshot eye would, where it exists, indicate the use of intoxicants.

Question 53.—The case here referred to occurred in 1887 in Yemethin in Upper Burma. The sepoy was in my regiment. I knew him by face. Nothing had struck me about him. He was between 30 and 35. No motive was proved at the inquiry. He fired off several bullets, but hit nobody. He fired from the house he was in. As he would not lay down his arm, the Colonel ordered him to be shot down and he was killed. He belonged to this presidency. When I went to examine his kit with the officers of the regiment majum was found. The sepoys said he ate this, especially at night. The Court of Inquiry gave their decision that the man ran amok from eating ganja in majum. Majum was the only form in which he was shown to use the drug. I speak of him in my written answer as a ganja smoker, because (I think) that ganja was probably found in his parcel. My statement is only based on that: I must have been told that when I was writing. It was about midday that the man fired at his comrades. The first shot was fired at the havildar. There was no mention at the inquiry of any quarrel with the havildar. The man's character was perfectly good so far as I remember. He was certainly not a marked man in any way. I had no idea that he was in any way of evil character though I knew him very well. Therefore the only solitary connection between the running amok and majum was that majum was found in his bag after the crime. Most Madras sepoys drink more or less. I do not know if he did.

89. Evidence of SURGEON-MAJOR H. A. F. NAILER, Acting District Surgeon, Tanjore.

1. My attention has not been specially drawn to the subject. What little I know I have picked up during my service of nearly seventeen years, of which five were spent in charge of native regiments.

2. As far as I know, all these three varieties are called by the name of "green" or leaf ganja.

19. I have only heard that they are used for smoking.

23. Not that I am aware of.

28 to 31. I do not know.

32. During the Mohurram festival the men of all ages who carry the "panjah" are intoxicated

with some preparation of hemp. I have never seen any one of them eat the confection, but by universal testimony such is the case. It is done to inure them against fatigue and to make them behave in a "frenzied" way. I believe that these men and lads continue the practice after the feast.

36 and 37. I do not know.

39. I do not know.

40. I believe preparations of hemp are largely used by Muhammadan hakims in their practice.

41. (a) and (b) Yes.

(c) I do not know.

(d) It is largely used, I believe, as an aphrodisiac by hakims.

42. From the known medicinal action of the drug I consider that the moderate use of it is beneficial. It calms the nervous system, assuages hunger, is good for spasmodic respiratory diseases, and in all respects acts like tobacco.

44. It satisfies a want felt by him, like taking a good cigar. It calms his nerves and makes him at peace with the world. It stays his hunger, so that he can placidly see his food being cooked for him without wishing to partake of it half raw.

45. (b) Yes; it makes him thin.

(c) It lessens his appetite.

(d) I believe it cures them.

(e) Yes.

(f) I do not think a moderate use will produce insanity. In the cases I have met, although the persons were said to be habitual ganja smokers and knew how to prepare the drug, it could not be clearly ascertained whether the habit was the cause of the insanity, or was resorted to to check the brain disturbance that precedes insanity. The insanity is of the maniacal type.

One of the early symptoms noted in the case of men suspected and afterwards detected was a peculiar bloated appearance of face and general anæmia, with a general dull appearance. The insanity

produced is of a temporary character, and the symptoms appear when the drug is used after a period of intermission. A case that came under my notice is that of a convict in the District Jail, Tanjore, who owns to having indulged in the use of ganja for the past nine years. He says he was employed as a shipping lascar, and from seeing others indulge in the practice, began to smoke ganja. He found that it inured him to fatigue and promoted digestion. I cannot ascertain if there is any family history of mental aberration. He craves for the drug now, but its withholding does not seem to affect him, except that he is very restless and suffers from insomnia.

Another case of a convict warder, who, for no apparent reason, was seized with furious maniacal delirium. He was concerned in a ganja case, and it was supposed he had taken some of it. By care, rest, withdrawal of drug, etc., he recovered, and did not afterwards exhibit the same symptoms.

Some men who have no recorded ganja history do confess to the use of the drug.

46. Already included in 45.

47 and 48. I don't know.

49. I have no information.

50. I do not know.

56. I do not know.

57. I have no knowledge of this.

90. Evidence of SURGEON-MAJOR JOHN LANCASTER, *District Surgeon, North Arcot.*

1. I have been in medical practice in South India for twenty years.

19. Ganja is used in other ways besides smoking; it is eaten by some, and drunk in the forms of subzi and bojah, and enters into the preparation of an intoxicating confection called majun. It is used in some of the large towns of Southern India.

23. Yes. In some of the large towns of this presidency, chiefly by Muhammadans, fakirs, and sanyasis and wandering mendicants. It is also used in some malarious tracts, as it is popularly supposed to have anti-malarious properties. It is not used to any large extent.

29. Opium, nux vomica, and betel-nut and leaf are occasionally so used; to flavour the mixture and to add to its intoxicating properties. I know of no preparation such as bhang massala, but I believe ginger, pepper, poppy seeds, cinnamon, fennel, milk, and sugar are sometimes added.

30. In company chiefly. It is chiefly confined to the male sex. Prostitutes sometimes use it.

No; it is extremely rare, indeed, for children to use any of these drugs.

31. (a) No.

(b) It is difficult to shake off the habit when once formed.

(c) Yes, there is a tendency to do so.

32. (a) It is customary for fakirs and sanyasis in their annual gatherings and anniversary celebrations at tombs and festivals in temples to have ganja and tobacco supplied to them by the guardians of the tombs and temples.

(b) Though the use of these articles is not essential on such occasions, yet it is a custom of long standing.

(c) The use is sometimes excessive on these occasions.

(d) Yes.

There is no religious sanction for the practice, which is condemned by many Muhammadans and Hindus.

36. I consider that the use of alcohol is rapidly spreading, but I have no definite proof that it is taking the place of these drugs.

39. It is said that smoking the drug more readily affects the lungs and brain. Rapid delirium often follows excessive smoking. I have seen two cases of mania (homicidal) following smoking. They came under my immediate observation.

40. Yes. By Muhammadan doctors. Externally it is used as a poultice and ointment for ulcers, in piles, in prolapsus ani, and for the ear. Internally in infantile convulsions, in dysmenorrhœa, and in tetanus, in malarious dysentery. As an aphrodisiac it is largely used, but its after-effects are bad, leading to impotence.

41. Yes.

(a) As a digestive. Yes.

(b) Yes.

(c) Yes.

(d) As a tonic and sedative.

44. (a) It is a stimulant, and then a sedative.

(b), (c) and (d) Yes.

(e) It does not as a rule create an appetite.

(f) About an hour or two.

(g) Yes, headache frequently and constipation.

(h) Yes.

45. *Vide* 46.

48. The excessive use does impair the constitution, and has evil effects both moral and mental. There is no doubt about this. It injures the appetite and digestion finally. It causes bronchitis, asthma, and dysentery. It impairs the moral sense in every way. It has been the exciting cause of insanity (homicidal mania) in two cases under my observation in hospital. There have been also five cases of insanity under my observation in the Central Jail, and the type has been that of mania with homicidal tendencies. The insanity is in many cases temporary, but it may be re-induced by a return to the use of the drug. No doubt of this. The symptoms are violent, and there is a tendency to homicide. Insanes do not usually confess to the use of the drug. I have noticed in several cases that the patients were suffering from old standing disease, chiefly stricture.

47. No.

49. (a) and (b) Yes.

(c) It is generally used in small doses, and is less injurious than its use as an ordinary narcotic. It is also accompanied with good food.

(d) The use of the drug ends in impotence.

50. The drugs are not used in large or excessive doses as a rule when required for aphrodisiac purposes. Such use would defeat its purpose.

56. The effects of the drug are weakened when taken in moderation by the admixture of opium, betel-nut and nux vomica for personal consumption.

Oral evidence.

Question 1.—I have twenty years' service, nineteen of which have been passed in civil employ. I first practised privately for a year, and was then in military employ for one year before entering on civil employ. I have been twelve years in North Arcot. I served in the same district as well as in South Arcot and Salem as Sanitary Officer during the famine of 1877. I have had no special experience in insanity. I have been in medical charge of the Central Jail at North Arcot while I have served in that district. During the time I have been in North Arcot I have also had charge of the military hospital for details and sick from Burma.

Question 29.—Nux vomica and betel-leaf are not intoxicating.

Question 33.—The drug has for several generations among Hindus unduly fallen into its great disrepute, and with Europeans in India, as it is the drug of the poor man and associated in their mind with squalor, poverty and crime, and the knowledge that it is used in the haunts of vice and in the low bazaars of big towns. The beneficial uses of the drug have been quite forgotten owing to its abuse. The use is not common in Southern India. Crime is not unfrequently associated with the drug without sufficient grounds.

Question 45.—The cases mentioned under Question 39 are the same as those mentioned under Question 46. I have had no opportunity of noticing the effects of the moderate use of the hemp drugs. They have not come before me.

Question 46.—My answer regarding the effects of the excessive use (excluding insanity) are based on my inspection of smokers in the ganja shops and the opinions of Muhammadan private practitioners whom I have consulted. So much of my answer, therefore, is not the outcome of my professional experience gained in the course of treatment. The examinations at the shops were made only with a view to answering the questions of the

Commission. I did not find men actually suffering from any of the diseases named, but I found them in broken-down health. There was a large proportion of men in broken-down health, but I only paid three visits in all to the shops, and the same man did not come under my observation a second time. The men in broken-down health were decidedly poor people. Their physical condition may have been in my opinion to some extent due to their poverty: it is the drug of the poor man. Except the five cases of insanity and two of homicidal mania, I have not in my twenty years' experience ever had the evil effects of the drug brought to my personal notice.

All the seven cases of insanity I have mentioned were ultimately transferred to the lunatic asylum. The two cases (homicidal mania) first mentioned occurred in the Military Hospital at Nellore. One of them was a case which occurred the very day I took charge from Dr. Pemberton. The man was sentenced to 8 years' imprisonment. The man was sent ultimately to the asylum in 1891, because he became insane again, apparently from using the drug, for he was found in possession of a bundle of ganja which had been smuggled into the jail. The other was the case of a sepoy who was admitted one night into the Regimental Hospital because he had been found in the regimental lines behaving in a violent manner, striking and beating people. He was in a state of violent delirium when brought in. His brother and other relatives told me that he had been smoking in a ganja shop that night; that he was a quiet man at other times, and that this condition was due to ganja; that he was in the habit of taking ganja; that this was not the first time he had become violent. After about two days he became quiet, and was sent for further observation to the jail, as I could not keep him in the Military Hospital any longer. At the jail also he was under my observation. I reported upon his case as District Surgeon, with the result that he was sent to the lunatic asylum. He tried to strike the Hospital Assistant and his relatives, and therefore I have called his case one of homicidal mania. In the jail the type of his insanity changed, and he became more or less imbecile. It was the fear of his breaking out again which induced his relatives to ask me to send him to the asylum, as he had six children at home. I had a good deal of communication with the relatives about this man. I reported the case as due to ganja. I enquired into the cause of his insanity. The history as well as the marks on his hands showed it to be a case of ganja insanity. I asked the relatives what the cause of his condition was, and they told me he had been to the ganja shop. That was the enquiry which I made, and which led me to attribute the case to ganja. I asked no other question with regard to cause, as the relatives gave a complete history of ganja. I cannot remember now, but I must also have asked if there had been family troubles. I looked upon ganja as the exciting cause; I cannot say whether any predisposing cause was present. Any cause which would drive a man to smoking, such as sorrow, poverty, I should regard as a predisposing cause. I did not make enquiry regarding heredity in the case. I cannot remember if notes of the case will appear in the books of the Military Hospital. The Sub-Collector sent the man up and issued the warrant for his detention in jail for further observation. The military authorities moved the civil authorities to take action in the matter. I am doubtful if the case was entered in the military book.

The other five cases of insanity were cases which came under my observation in my capacity of

District Surgeon, and which were sent to the lunatic asylum on my report.

The last sentence of my written answer refers to eight patients who came to the Jail Hospital suffering from strictures and fistulas of long standing who were reported to be ganja consumers. They were prisoners. Their being ganja consumers was brought to my notice by their asking for ganja. The connection of ganja with these cases was that the drug had in my opinion been taken by these persons to relieve pain. It could not of course be the cause of stricture or fistula. They were satisfied with tobacco, and opium. I am not allowed by rule to give ganja in the form in which it is sold in the bazar, and opium is in my opinion a safer drug. I am not allowed to give ganja in any form, but I am allowed to give opium to be eaten,

and I gave it in that form. As Medical Officer in charge of the Jail Hospital I am not at liberty to give ganja or tobacco to the patients even as a mode of treatment without the sanction of the Jail Superintendent. I have not prescribed the smoking of ganja for tetanus or for any other complaint, but have prescribed the tincture and extract of *Cannabis*.

Question 53.—The only case which I know of any violence or breach of discipline connected with hemp drugs in the Central Jail during the twelve years I was in medical charge, was that of Ibrahim Khan, the sepoy above referred to. The average jail population for the past year, was 1,200. For short periods I have acted as Superintendent of this jail.

91. *Evidence of* SURGEON-MAJOR H. ST. C. CARRUTHERS, *Civil Surgeon and Superintendent, Lunatic Asylum, Calicut.*

Oral evidence.

1. I am in my sixteenth year of service, and have served in both the Civil and Military Departments. Since 1882 I have been almost entirely in civil employ. I am Superintendent of the Lunatic Asylum, Calicut, and am also District Surgeon. The charge of the Asylum has been with me for nine months. Before coming to India I was Resident Medical Officer of the Lunatic Asylum at Alton in Hampshire for four months. I have never had my attention specially directed to the hemp drugs before the present enquiry began.

45. The general register of the Asylum is written up by the Hospital Assistant in charge of the papers in the case of each lunatic. I do not see this register unless I specially call for it, or special orders are required on any point. I never have as Superintendent of the Asylum made any enquiry regarding the cause of insanity, and there are not, as far as I know, any orders requiring me to make enquiry. The Civil or District Surgeon is the officer who ought to make any enquiry that the medical officer has to make. He is the officer who signs both Form A and Form C. As Civil Surgeon I have to enter cause of insanity in Form C. This cause is often entered as unknown. I cannot recall the precise orders on the subject, but as a matter of fact I always do make enquiries, questioning the insane himself, and sending to the Magistrate if I cannot make a shrewd guess as to the cause from my own enquiry. In referring to the Magistrate I send Form C marked with crosses opposite the heads under which I want information. Sometimes I make general enquiry in the Sub-Jail, asking if the police or others can furnish any information. But no information is ever obtainable in this way, and to the best of my recollection the friends of the insane never attend. I never go beyond such general enquiry in the Sub-Jail. Generally therefore when a cause is entered in Form C it is entered on the authority of the Magistrate. When I form an impression or guess as to the cause, I generally use the word "probably." An entry made by the Magistrate on the other hand is always definite as far as my memory serves me.

Before joining the Asylum I suppose I must have seen a dozen or so of cases and not more attributable to drugs in the whole course of my service. The insanity in this district is far greater than in any district in which I have served, and I do not

think I have seen more than two or three drug cases here. I include opium, but not liquor, in the term "drugs" in the above answers. I think the hemp drug cases generally come from the wandering mendicant classes of the population. Regarding typical symptoms of hemp drug insanity I have rightly or wrongly got it into my head that there is a peculiar expression on the countenance of every such insane, which I cannot define, but which once seen can hardly, I think, be mistaken. This expression is almost as pronounced as the expression that is present on the faces of patients suffering from uterine disease. I think the expression is absent in cases of insanity from other drugs, that is, presuming that I have any knowledge of the subject, which I am prepared to admit I have not. As far as I have seen, hemp drug insanes are voluble and excited, and inclined to be a little bit violent, lapsing into the sulky state. In one or two cases sent to me for observation I have seen patients after a few days' restraint reverting into a perfectly rational condition. These last cases appear to be cases of intoxication rather than insanity. The type might, I think, be described as *acute mania*. I have not the least idea what the duration of such cases is, as I have had no experience until recently, the patients only passing through my hands in my capacity as Civil Surgeon. In a case of *acute mania*, where the typical expression I have described was present, I should enter it in the certificate as probably due to hemp drugs. I do not think I know enough about the subject to say what circumstances would enable me to assign hemp drugs definitely as the cause of insanity.

In cases which come before me, the causes, as I have said, are generally unknown; where they are known, the statement of cause is based on facts of which I am not cognisant and for enquiry into which I am not responsible, and I therefore accept them. Should a man be sent to me suffering from insanity, the result of drink, my impression is that I should have less hesitation in assigning the cause. My position as Superintendent of the Lunatic Asylum requires me to take charge of insanes when they are sent in and retain them until they are fit for discharge. I am simply keeper, and incidentally medical attendant, and not responsible for any statements and certificates received with the patient as long as they are in order. The cause of insanity is a fact worth knowing for the treatment of the insane. I therefore keep it in view. But I make

no alteration of the cause in the asylum register, which, by established practice, is derived from the certificate, Form C, which comes with the patient, and is written up by the Hospital Assistant as described above. The entry in annual statement VII is founded on the entries in the General Re-

gister, and may therefore be said to be based on the Magistrate's enquiries. I do not consider myself responsible for it. Whatever my opinion may be, I am not entitled to alter a statement based on fact with which I am not acquainted.

92. Evidence of SURGEON-MAJOR K. C. SANJANA, *Parsi, District Surgeon, Tinnevely.*

1. I have not had many opportunities of obtaining information regarding the matters connected with hemp drugs. The answers are framed from information derived from medical subordinates and a native hakim.

2. Yes. These products are respectively known by the names of bhang, charas, and ganja.

3. The hemp plant is grown by some people of this district in their gardens with chillies and brinjals.

10. They are of the same classes as other agricultural cultivators.

19. In this district ganja is chiefly used for smoking.

20. Pilgrims and bairagis who come to this district on pilgrimage, smoke ganja mixed with tobacco.

21. Flat ganja is used.

24. Some Muhammadans eat and drink bhang in the district.

25. The use of ganja has been on the decrease in this district, since the introduction of the license system which has kept up the price of the drugs.

30. Male and female both take it.

31. (a) Habit is easily formed.

(b) It is difficult to break off.

(c) No.

40. Ganja is prescribed by native doctors in the form of halwa as an aphrodisiac and for insomnia, pain, tetanus, hydrophobia, cholera, diarrhoea and dysentery.

41. In moderate doses, it is supposed by native doctors to increase appetite, improve digestion, and give staying-power under severe exertion or exposure. Pullers and Pariahs use these drugs occasionally to enable them to undergo excessive labour.

43. No.

44. It is refreshing and exhilarating, but does not produce intoxication. It creates appetite. The effect lasts for about three hours. A state of depression follows when the effect passes away. Want of subsequent gratification does produce longing or uneasiness.

46. Habitual excessive use produces general debility and impairs digestion and moral sense. I have seen one case of temporary mania as a result of habitual excessive use. There were no typical symptoms.

49. Yes. It is used by prostitutes.

53. Yes. No.

54. Yes.

93. Evidence of SURGEON-MAJOR W. O'HARA, *District Medical and Sanitary Officer and Superintendent of Jail, Bellary.*

1. Hospital and private practice; and jail experience for nineteen years.

2. Products of Indian hemp as commonly recognised in these parts:

(a) Bhang, broken and partially pulverised dry leaves, and the dust from ganja.

(b) Ganja, the agglutinated flowering tops usually rolled.

(c) Charas; not generally known.

"Cowri ka nisha,"—name applied to the products of Indian hemp with reference to the intoxicating effects obtainable at small cost—fraction of one pie.

Charas will not be considered for reasons stated above in these answers.

19. Ganja may be said to be used *entirely* for smoking; but very occasionally a confirmed smoker drinks a mixture of ganja and water to produce prolonged inebriation. Only one such case is known to me.

23. It is not known that bhang is ever used for smoking.

28. (a) One pie worth, to a $\frac{1}{2}$ or 20 grains.*

(b) { Three " " $\frac{1}{2}$ or 1 drachm*
to
Six " " 1 or 2 drachms.*

29. Ordinarily, only tobacco dust. *Exceptionally*, not known.

* Apothecary's weight.

Composition of bhang massa'a—Dry ginger, pepper black, cubebs, cloves, cinnamon, cardamoms, poppy seeds, Bengal gram, tippli or pippili, Mahratha moga, sugar, cocoanut, milk and ganja.

Instead of milk in the above mixture, the juice of the water-melon is used; or sometimes merely black pepper and water.

30. Bhang is usually drunk in company; ganja is smoked alone or in company; its use is restricted to the male sex; children are not known to indulge in hemp preparations.

31. No definite information.

32, 36, 37 and 39. Unknown.

40. "Purnathe Lahium," a sweet preparation of bhang, is used as an alterative; and may be purchased from most native doctors.

41. (a) Arrests metamorphosis of tissue, as is seen in its staying off hunger.

(b) Commonly used as an exhilarant by cart-drivers and foot-travellers, such as pilgrims.

42. Moderate use may be presumed to be harmless, as those who indulge in the moderate use cannot be distinguished from ordinary good citizens.

44. *Moderate use in habitual consumers.*—It is soothing, with perhaps a very transient cloudiness of perception. Yes, it is refreshing. Does not intoxicate in the sense of obliterating mental faculties and those of sensation. A larger meal

is said to be eaten if taken soon after a smoke. The soothing effects last perhaps for half an hour. Very like the effects of a pipe of tobacco, and the longing the same if not more accentuated.

45. (a) to (e) Not apparently so.

(f) and (g) No information.

46. See answer to question 50.

47 and 48. Not known.

49. Not known; though it is often stated that excessive use of ganja tends to induce impotence.

50. *Excessive habitual use.*—In my opinion excessive habitual use produces laziness, but not debauchery. Most of the cases of insanity that have come under my observation as due to this cause have been of a temporary nature, maniacal delirium and hallucinations; and the return of such cases would imply that the symptoms were reinduced by a renewed abuse of the drug.

51. Eight per cent. of the re-convicted prisoners confined in this jail confess to having occasionally used ganja, but none of them appears to have been an habitual consumer, moderate or otherwise.

53. With reference to the latter part of this question, I may cite the case of the Anantapur Collector's peon, a Muhammadan, who, while

under the influence of ganja, killed an old beggar man under the impression that he was a pig, but it is not known if the original mental aberration was antecedent or subsequent to the use of ganja.

56. Not known.

57. *Vide* 19.

In conclusion in my experience there is only one case of homicide which was attributed directly to intoxication from the use of ganja. The criminal in religious frenzy killed an old beggar-man with a club, mistaking him for a pig (unclean beast), and believing that he had done god-service. The subsequent history while in jail of this prisoner showed that his mind was unstable, and it was impossible to say whether the mental aberration was consequent on, and subsequent to, the use of ganja, or whether it preceded it and was due to other causes.

Further, I would wish to record that, as far as I know, the habit of using Indian hemp is not an obtrusive vice, nor is it, like alcohol, an incentive to crime; its votaries are usually shy and indisposed to exertion. It is commonly credited with the power of concentrating the attention in religious and abstruse meditations.

94. Evidence of SURGEON-MAJOR G. L. WALKER, Civil Surgeon, Ootacamund.

1. Personal acquaintance almost nil, as the consumption of Indian hemp preparations amongst the people of this presidency is extremely limited so far as I am aware.

2. There is only one small ganja shop in Ootacamund which was opened this year (1st April 1893). The consumers are chiefly hairagis (travelling mendicants) from Northern India, and the poorer class of local Muhammadans, who form a very small proportion of the population, such as are met with, also amongst peons and police constables. The hill tribes of the Nilgiris do not use ganja, or to a very limited extent; they use opium freely, however, especially the women. The cultivation of the hemp plant is extremely limited in the district with which I am acquainted; indeed, it cannot properly be said to be cultivated in the true sense, as but a few plants are grown near the houses of those who wish to indulge in its use themselves. The various narcotic products of Indian hemp are all locally known by the general name of ganja.

3. None that I am aware of. I am credibly informed that it does not grow spontaneously on the Nilgiris; the little that grows is cultivated.

4. The "*Cannabis sativa*" is known in this district, and I believe throughout this presidency, as ganja.

7. The little that is grown is for private consumption by the growers for the sake of the stimulant and narcotic drug. Ganja cultivation is very limited in this district; the total area would not exceed 5 acres in the aggregate. It is cultivated to this limited extent by a small colony of liberated Chinese prisoners at Neddivattam in this district, and by certain Wynaad Chetties who settled there from Mysore. Both these classes grow a few plants around their houses for their own consumption.

8. The total area under cultivation has always been very small in this district, not exceeding 5 acres in the aggregate; it does not appear to have increased lately.

9. There is nothing special; a few plants are grown near the houses of those who desire to indulge in the luxury of the drug.

10. The Badagas and Koters, the chief cultivating tribes of the Nilgiris, do not cultivate nor use hemp; they (especially their women) indulge freely in opium, but not ganja. Those who grow the plant at all are referred to in paragraph 7.

13. I am not aware that there is any restriction or selection, but I am confident that the plant is grown to a very limited extent in this province.

14. Those who cultivate a few plants for their own consumption prepare ganja for themselves.

16. All the preparations are called ganja here; the few individuals that grow the plant, prepare the various mixtures and combinations of the drug in their own houses.

17. All the preparations are made by the Muhammadan lower class.

19. They cannot be distinguished here, because ganja is applied to all. Those who use the drug, smoke it in the dried state, and eat it when worked up with jaggery and a number of spices, and made up into a ball.

25. The use of ganja is limited to a very small section of the community here, and does not appear to have increased or decreased.

29. The lower class Muhammadans mix ganja with 18 different spices, and work it up into a ball with jaggery; in this form they eat it as an aid to appetite and digestion.

30. A ball similar to the above is also given to Muhammadan children for a similar purpose.

31. Like all stimulants and narcotic drugs, the habit once formed, would, I have no doubt, be difficult to break off, and the tendency would be to increase the amount taken.

32. There are no special customs here in connection with the consumption of the drug. During the Mohurram festival men and boys indulge freely

in ganja, to intoxication ; they become highly excited, they dance wildly, and jump through fires ; and finally become stupefied, and helplessly drunk. The use of the drug at this time is excessive ; it is considered essential to produce the wild excitement and disregard of physical pain that seems necessary for the actors in these orgies. It does not appear to be subsequently injurious or to lead to the formation of the habit, so far as I have seen.

33. High caste Hindus would (theoretically at least) be against the practice, in accordance with their tenets of religion, which discountenance the use of stimulants and narcotics ; with regard to low caste Hindus, Pariahs, Native Christians, and Muhammadans, there cannot be said to be any public opinion against the moderate use of these drugs in private. There is no custom of worshipping the hemp plant in this province that I ever heard of. Public opinion is against the use of the drug to this extent, that respectable persons would not resort to ganja shops in public streets.

34 and 35. As is the case with any stimulant or narcotic, so with ganja, it would be for a time a serious privation to one accustomed to the use of this drug to forego it ; such an one would, if prohibited its use, probably endeavour to consume it illicitly. It would be very difficult to enforce the prohibition, the amount of the drug needed being small and easily concealed ; even in jails, prisoners though constantly under supervision, often manage to get hold of tobacco. The prohibition to a free man using the drug he has been accustomed to would undoubtedly give rise to a strong feeling of discontent in his mind ; the feeling of discontent would probably not amount to a political danger in this part of India, as the proportion of consumers to non-consumers is very small ; but I can easily conceive serious and wide-spread discontent following prohibition in parts of the country where a large proportion of the people (and those of excitable nature and warlike instincts) consume hemp drugs in some form. The ganja consumer, if prohibited the use of this drug, would probably have recourse to arrack, toddy, or opium. Many of the present consumers of ganja take it as the cheapest form of intoxicant.

37 to 39. I have not personally come across a case in this district suffering in any way from the effects of hemp drug consumption, nor can I call to mind a case amongst the civil population in any of the 12 districts of Madras presidency in which I have served as Civil Surgeon, though I have seen an occasional case of ganja or bhang intoxication amongst sepoys when "on a spree." I cannot therefore differentiate the effects of the different preparations of the drug.

40. I am not aware.

41 (a), (b) and (c) I have heard it stated that it has these qualities, and that it stays the craving of hunger ; but I have had no opportunities of

verifying such statements, as the proportion using the drug in this province is so small.

42. I think the moderate use of the drug must be harmless, as nobody has ever been brought to my notice (as the Government Medical Officer in charge of the public dispensary and hospital at various stations) who was suffering from the effects of the drug, or whose illness was in any way caused by its use.

43. Apparently so ; they are seldom or never brought before Magistrates for breaches of the peace.

44. Pleasurable intoxication, a buoyant, happy, contented feeling ; pleasing ideas pass rapidly through the mind ; after a time sleep comes on accompanied by pleasing dreams. Pain, if present, is lessened or removed. Sometimes complete anaesthesia supervenes ; the effect lasts some hours, but the time varies. The use of the drug is not followed by nausea, headache or constipation as opium is. When taken in smaller quantities, it is said to allay the cravings of hunger if food is not available, and to create appetite if taken in anticipation of a regular meal.

45. My acquaintance with the use of the drug is too limited to enable me to answer this question.

49 and 50. *Cannabis sativa* is considered to be an aphrodisiac ; if constantly used for this purpose, it would naturally be injurious ; all aphrodisiacs are so, as they stimulate the sexual organs to unnaturally frequent action, thus exhausting the system. In this way, the constant use of hemp for this purpose would undoubtedly tend to produce temporary impotence ; the evil effects of the excessive use of the drug as an aphrodisiac would naturally exceed the moderate use. In this particular direction *Cannabis* would be more injurious than opium or other narcotics.

53. I cannot give in detail of any particular case ; but I have always understood that when sepoys "run amok" and discharge their loaded firearms promiscuously, they do it under the influence of hemp in some form.

54. Cases have occurred in which sepoys in this presidency, meditating revenge on a comrade or an officer, are reported to have fortified themselves with ganja for the contemplated act of violence.

55. (a) I am not aware.

(b) It is a narcotic, and as such is followed by sleep and stupor, if given in sufficient quantity.

63. There is only one small shop in this district for the retail sale of ganja and its preparations ; it was opened this year (1st April 1893) ; it seems unobjectionable. There is no wholesale vend of hemp drugs in this district.

68. There are no such shops in this district ; the demand is insufficient.

69. I am not aware. The local public have certainly no objection.

95. Evidence of SURGEON-MAJOR S. C. SARKIES, District Surgeon, Nellore.

1. I have not had extensive opportunities of deriving much information and experience regarding the utility of the drug called Indian hemp. As a medicinal preparation, I have seldom or never used it, as it is a drug which I believe is rarely used by physicians for the treatment of diseases. But I know that in India hemp is commonly and universally consumed by certain natives in good or indifferent health. I have seen large quantities of

this drug in the possession of natives of Bengal, North-Western Provinces and Oudh, touring through Madras presidency on pilgrimage. These men are called bairagis, and nearly all of them are addicted to the use of hemp. Being constantly exposed to rough and inclement weather, after leaving their homes, they are often constrained by illness to take refuge in hospitals here and there. Ganja and bhang have often been found in their possession.

Besides bairagis, I have also found ganja in the possession of ordinary native residents of this town chiefly amongst the poor and low inhabitants. I have also found ganja in the possession of a convict of the district jail here.

2. Yes.

19. Charas is not, I believe, much known or consumed in Madras presidency, and I know nothing about it, except that it is the resinous exudation of the leaves of Indian hemp. Whether ganja is used for eating or not I cannot say exactly, though I may safely assert that it is principally used for smoking. It is grown in this district.

23. I am not aware that bhang is used for smoking. If so used, it is used as a substitute for ganja, if this latter drug is not available.

28. I do not know.

29. (a) Ordinarily mixed with eorlander, nutmeg, ginger, cardamoms, poppy seeds, aniseed, cloves. (b) Exceptionally mixed with dhatura or nux vomica.

30. (a) I do not know.

(b) Principally to the male sex. Women are not entirely free from the habit. I have noticed the habit prevailing more amongst elderly men than amongst the young.

(c) I do not know.

31. (a) Yes.

(b) No.

(c) Yes.

32. I do not know.

36. No.

37. I do not know.

39. I should say smoking is more injurious.

40. No.

41 (a) Yes, in moderation.

(b) Yes, for the time being.

(c) No.

42. In moderation the drug does no harm; at least I have not heard of any evil effects follow the moderate use of the drug.

44. It produces intoxication, which may last for an hour or two. It does not create appetite.

45. The habitual use of these drugs tends to

impair constitution, by producing loss of appetite and emaciation, and a constant irritable cough. Though I have not seen any marked cases of lunacy arising from the use of ganja, yet I believe that insanity is often due to its use, as may be seen on a reference to the return of any Indian Lunatic Asylum.

47. No.

49. I do not believe the drug is used by prostitutes as an aphrodisiac. I believe the drug has the effect of lessening the desire for sexual intercourse.

56 and 57. I do not know.

In conclusion, I am of opinion that it is not desirable to suppress the consumption of Indian hemp. It is an indigenous drug and has been used by natives for centuries. It is a cheap drug, and hence it is almost solely used by the very poor and low natives. It is easily obtained and easily carried about from place to place by bairagis and sanyasis in their travels, and to these men the drug is most useful as an intoxicant and sedative, and, I believe, as an antaphrodisiac as well.

It is very doubtful whether the moderate use of this drug tends to shorten life or injure the constitution. I have seen old men of sixty-five years or more who have been addicted to the drug for nearly half a century and yet have appeared to be in good health and in full possession of their faculties. There is no doubt that the return of lunatic asylums go to show that ganja smoking is a cause of lunacy, but then it may be asked whether or not alcohol has the same effect. I certainly think so, and I also think ganja is used in far greater moderation by the poor natives in India than alcohol is in Europe. It seems hardly necessary to draw comparisons between the ill effects produced by the immoderate and habitual use of alcohol on the constitution and those produced by ganja. But I will merely remark that I think alcohol is far more injurious in every way.

In Military and European hospitals where in-patients are treated, from one-third to half the total number of admissions may be traced to alcohol or venereal diseases. I mention venereal diseases, because I believe these diseases are very often contracted by persons who are under the influence of drink.

96. Evidence of SURGEON-MAJOR W. F. THOMAS, Acting District Medical and Sanitary Officer, Chingleput.

1. Served in the Central Provinces, India, and in Orissa province, where all three varieties of the hemp plant products are used (smoking and eating and drinking). Bhang and ganja are also used by the native army to some extent, particularly so amongst the Muhammadan section of the army; and in the native army I had opportunities of obtaining some information on the subject.

2. Siddhi, the larger leaves and capsules without the stalks. In all other respects the definition may be accepted.

Siddhi—Ganja-ilai (Tamil) or bangi-ilai (Tamil).

Charas—Ganja-pal or ganja-rasham (Tamil).

Ganja—Korkar-muli or kalpam or ganja (Tamil).

19. Ganja and charas are used for smoking and chewing. Smoking chiefly prevails in Bengal, and is resorted to to produce its intoxicating influence.

23. Yes, chiefly used in Bengal and in the Central Provinces. It is used to a considerable extent by the native army, particularly the Muhammadan section of it. The habit is by no means general among them.

29. (a) Majum is a compound of bhang, butter, sugar, flour and milk; (b) poppy seeds, cocoanut milk, milk, plantains and dried buds of roses are also used in making bhang.

(b) Bhang is mixed with poppy seeds, pepper, ginger, jaggery and milk. Bhang is occasionally mixed up with dhatura in toddy and arrack to produce excitement and sexual passions, and to produce a longing on the part of the consumer to partake of more liquor. Cantharides is mixed with bhang in toddy and arrack to produce sexual excitement.

30. Ganja is practised in solitude, whereas

bhāṅg is practised in company. These habits are mainly confined to the male sex, chiefly by those over 30 years of age. In some cases, younger people, and even children, drink a mixture of bhāṅg. Prostitutes also occasionally take bhāṅg for sexual excitement.

31. The habit of smoking ganja is easily formed. This habit is difficult to break off, and there is a tendency for the moderate habit to develop into the excessive.

32. Bhāṅg is made and freely sold in some places during the Kama (Indian Cupid) festival. Some religious men (ascetics) use bhāṅg. It is not essential that such religious men should take bhāṅg. This leads one on to the formation of the habit.

36. Alcohol and bhāṅg are frequently taken together by the habitual consumers of bhāṅg. But alcohol, *inso facto*, is not substituted for any of these drugs.

37. The drinking of bhāṅg is more intoxicating, and leads to no manual or mental work.

39. The drinking of bhāṅg is more intoxicating. While smoking is soothing, drinking produces an uncontrollable restlessness, singing, boisterous talking, and fighting; and a regular immoderate indulgence is a predisposing cause of insanity.

40. Ganja is so used as a narcotic, diuretic or parturifacient. It is generally prescribed for *delirium tremens*, various forms of neuralgia and nervous affections.

41. (a) (b) and (c) Of no use.

(d) Ganja is primarily stimulant; then it is used as an anodyne, sedative, antispasmodic. It is also used as a narcotic, diuretic, and parturifacient. It is a powerful aphrodisiac.

42. The moderate use (in smoking) is not harmful. It has a soothing effect. I have known many persons who smoke in moderation none the worse in any way.

44. Ganja produces first a period of excitement or intoxication, followed by sleep and coma; the intoxication often lasting a couple of hours. Native young men, chiefly Muhammadans, use bhāṅg to enjoy pleasant dreams, chiefly of a sensual kind. Bhāṅg is also considered refreshing, and that is the reason why it is chiefly used during the hot weather, while ganja is smoked during the cold or wet weather. It does not allay hunger. It does not create appetite. In moderation, there are no after-effects. The want of such produces longing and uneasiness.

45. (a) No.

(b) It weakens the pulmonary action.

(c) The stomach is not affected, and the appetite may be increased.

(d) A few suffer from dysentery, bronchitis and asthma.

(e) No.

(f) The moderate use does not deaden the intellect or produce insanity. It is a predisposing cause of insanity. I saw two cases of insanity produced by ganja being used in excess. In both cases acute mania was present, and in both it was permanent.

46. Ganja produces loss of appetite and strength, trembling and much mental weakness. The excessive use produces moral inertia—a desire not to do any kind of work, mental or moral—and this state gradually leads on to cerebral softening.

47. Yes, it is hereditary.

48. The habitual excessive use has a stronger hereditary tendency.

49. A class of people, called Setts, on the West Coast of India, use all these drugs as an aphrodisiac. All the preparations are well-known aphrodisiacs, and it is so used by prostitutes. This aphrodisiac property induces finally certain special diseases, as locomotor ataxy and sclerosis of the cord. The free use of hemp does produce impotence.

50. The excessive use of all, or any, of these drugs produces a gradual loss of memory, induces nervous debility, cerebral softening, sclerosis of the spinal cord and brain, locomotor ataxy, and insanity.

56. As stated in a previous article, dhatura and cantharides are mixed (a) to produce undue sexual excitement. Nux vomica, dhatura and bhāṅg are introduced into country liquors to produce cerebral excitement and intoxication. A certain class of people administer these admixtures to unprotected women to produce narcotism with a view to sexual indulgence.

57 (a). A tolerance of opium imparts to the system a similar power of resisting the influence of ganja. Hasebisch is the name of the plant in a particularly dried state. In some people, even the smell of the leaves, which is strong, is apt to produce intoxication.

Oral evidence.

Question 1.—I have had nearly fifteen years' service, of which about three have been passed in civil employ. I have had no special experience of insanity. In the Central Provinces and Orissa, I was in military employ with a native regiment. In Madras I have also served with a regiment. My paper contains the experience gained in both military and civil departments.

Question 45.—When I was with the 17th Regiment at Trichinopoly, I had to treat three cases of ganja-poisoning. These men drank liquor and indulged in ganja. In all these cases there was congestion of the lungs present. The men were all suffering from the effects of ganja when they came to me, and they all eventually became insane and were sent to the Madras Asylum. These are the only three cases in which evil effects of the drug have come directly under my notice. The symptoms, in all three cases, were the same and, for that reason, I concluded the pulmonary affection to be result of the drug. I have learnt by enquiry from medical subordinates and people in villages, that dysentery, bronchitis and asthma result from the drug; I have no personal experience on this point. The two cases of insanity mentioned in my written answer are among those referred to above. I did not mention the third case in my written answer, because I had no notes of it. I have not brought my notes of the two cases. I am not prepared to give details of the cases. The notes are those made by me in the hospital books. To the best of my recollection there were in all three cases restlessness, a quarrelsome tendency, desire to fight, weakness of memory, inability to converse coherently or follow an argument. I noticed these symptoms before I made up my mind to send the men to the asylum. One of them certainly suffered from impotency, and an utter disinclination to work. It was in the hospital I diagnosed the impotency. The man, in answer to my question, told me he had sexual desire, but was unable to gratify it. I noticed no other

symptoms. Those I have mentioned are, I should say, the characteristics of the hemp drug insanity. I should expect to find impotence as a general rule in cases of the excessive use of the hemp drugs. To the best of my recollection this symptom was absent in the other two cases. The symptoms of hemp drug insanity are those of acute mania, and may arise from causes unconnected with hemp drugs. Impotency is a typical symptom of hemp drug insanity, and I can't mention any other symptom which is typical. In the two cases in which this symptom was not present, I made my diagnosis on history. Besides the three cases mentioned above, I have had in the course of my service one case of melancholia, and no other cases of insanity. I have not made a special study of insanity, and I do not profess to be able to give evidence of special value regarding it. I have not seen cerebral softening in the *post mortem* examination of a ganja consumer, nor have I had any case of the sort to treat. The opinion I have stated is based on hearsay, not on any case shown or quoted to me.

Question 47.—This answer is based on information gathered in the villages of the Chingleput

district. I believe the heredity to take the form of an inborn craving for the drug. I have not seen any case of the kind.

Question 49.—Locomotor ataxy and sclerosis of the spinal cord have come under my personal observation. One of the lunatics I have referred to above had one of these diseases, and one the other. The one who had locomotor ataxy was the impotent man. I think ganja was the direct cause of the locomotor ataxy. The usual causes of this disease are exposure, malaria, syphilis, and accident. Excessive sexual indulgence is a common cause. The ganja as an aphrodisiac probably caused excessive sexual indulgence, and that resulted in locomotor ataxy. This would also be a very probable explanation of the impotence. I have had only the one case of sclerosis of the spinal cord, and I attributed it to ganja, because I could not discover any other satisfactory cause.

Question 57 (a).—The statement that the smell of the leaves may produce intoxication is based on my own observation. I saw a boy of 13 affected in this way. It seemed to me to be a case of idiosyncrasy.

97. Evidence of SURGEON-CAPTAIN C. F. FEARNSIDE, Acting District Surgeon, Ganjam.

1. From ganja vendors and consumers and my own experience of cases.

2. Only ganja and bhang.

3. It grows, as far as can be ascertained, in the following localities in the district:—

(1) Mandasa taluk, (2) Peddakunidi taluk, (3) Peddakunidi maliahs, (4) Tikkaballi in the Gumsar taluk.

It is abundant in all these places.

4. Ganja and bhang. Yes.

5. As there is no such term 'wild hemp' in use in the district, I cannot say positively that there is wild hemp growth in the district, but there is growth of hemp in the maliahs and hill tracts.

6. Not known.

7. There is cultivation of hemp plant in the district.

(a) Yes.

(b) No.

(c) Yes.

(d) No.

8. I hear that throughout the district for the past two years there has been an increase by private individuals growing the plant for their own use in their back-yards and mutts for the purpose of evading license and to supply their fellow-people with the drug.

9. The seeds will be sown and the plants will be removed to a well cultivated land, manured and replanted there. The cultivators will inundate it with well or river water. As the plant is growing it will be twisted. By doing so, the plant will be in a flourishing condition with too many branches. Then the cultivators cut the trunk of the plant lengthwise for about 3 or 4 inches, and place a stone or a piece of a tile within until the plant bears ganja. This method of operation produces best ganja without seeds or other. This will be done only to the female hemp plant. Male plant only produces bhang (the leaf of the male plant).

10. No; they are of the same classes as other agricultural cultivators.

11 and 12. Not known.

13. It appears to me that the cultivation of the hemp plant for ganja is not restricted. The cultivation is common. I do not think that the hemp grows in a special condition of soil, as its growth will be noticed everywhere. It will grow in hot climates and in dry lands. It will be easily cultivated, excluding the lands of a clayey and wet nature.

14. (a) Yes.

(b) No.

(c) Yes.

Throughout the district, and especially in the place mentioned in question No. 3.

15. (A) *Smoking*—After removing the seeds, the ganja will be placed in the palm of the left hand and water poured down on it, while with the right thumb the ganja is squeezed so as to rid it of the greenish resinous matter, which they consider to be impurity. Next process is to break up the ganja mass so cleansed into small lumps, and mixing it with powdered tobacco. This combined mass is put into a clay pipe (chillum) specially prepared for the purpose. Now it is ready for use.

(B) *Eating*—Ganja is first boiled in milk or water so as to remove the resinous matter which it contains, and then the mass is taken and squeezed well to remove all the water from it. This is then thrown into boiling sugar water along with the spices powdered previously. This preparation is allowed to remain on fire until it gets a thick consistency so as to be made into pills, which are afterwards used, and called by the name of majum.

There are other preparations on a similar basis, prepared with milk, ghi, sugar, and other tonic roots, mixed with spices, and the whole mass called laham laham.

(C) *Drinking*—Ganja or bhang will be first boiled in water and afterwards ground with spices

and mixed up with water or milk, and then taken as a drink and called bhang.

16. (a) Yes.

(b) Yes.

(c) Know nothing about the wild hemp plant.

17. By all classes.

18. Deteriorate by keeping. They do not quite lose their effect in time. They keep good for one year.

Dampness causes deterioration, which may be prevented if the drugs are preserved between layers of straw in a box well closed.

19. Ganja for smoking and drinking throughout the district.

20. All classes.

21. Flat ganja.

22. Not in this district.

23. Not usually in the district.

24. No special class can be noted. Majority drink bhang.

25. Increasing. No special reasons, except on the advice of their companions.

26. About—

(a) 48 per cent. of the consumers.

(b) 25 " " "

(c) 25 " " "

(d) 5 " " "

27. With the exception of (b), which are bairagis, the remaining consumers are of all classes, and the habits of life generally are of labouring poor class.

28. (a) $\frac{1}{4}$ of tola costs 3 pies.

(b) 1 tola costs 1 anna.

29. For smoking, tobacco is always used for eating, spices and tonic roots, liquor, etc., for drinking, milk, sugar, and spices. Dhatura not used for strength, constipation, spasms, etc. Bhang massala is prepared and sold in the bazars. Its ingredients are—

(1), all spices; (2), kuskus seeds; (3), cocoanut; (4), pepper; (5), dry ginger; (6) camphor.

30. (a) Ganja is used in company. Only confined to male adults.

(c) No.

31. (a) and (b) Easily learnt and difficult to break off.

(c) Yes.

32. One ganja smoker visiting another, according to custom, offers his pipe for smoking. This is not essential. In many cases it is moderate.

33. These drugs are generally consumed as a medicinal agent. The bairagis take it in a religious point of view. The cooly or labouring class as a restorative after a hard day's work.

34. Yes; the reasons are—health fails; appetite is lost; weakness of limbs sets in; twitching of the muscles of the legs and hands; incapable to perform his usual work; sleeplessness, restlessness and easily excited. No probable number of each class can be given.

35. (a) No. (b) Yes. (c) It can be enforced gradually.

(d) Yes. (e) Most probably.

(f) No.

36. No.

37. No charas in the district.

38. As only flat ganja is used in the district no definite information could be given.

39. It appears that smoking is less injurious, as its effects are very temporary, passing off within a couple of hours, whereas eating and drinking the effects will remain for about ten or twelve hours.

40. Yes.

41. (a) Yes.

(b) Yes.

(c) Yes.

All classes use the drugs for the above purposes. The proportion cannot be given. It is both the moderate occasional and moderate habitual consumers who resort to use of the ganja or bhang.

42. From what could be gathered from information and from the inspection of several cases, I consider the moderate use of these drugs to be harmless; but there is the tendency to take increased doses with same effect.

43. Not.

44. Exhilaration of spirits. It is refreshing. Produces intoxication. It creates appetite. Smoking, two or three hours. Apparently no after-effects. The want of subsequent gratification produces uneasiness.

45. Impairs the constitution, causing weakness of the limbs and other tissues, and hence the drug has to be taken to keep up the tone of these tissues. Causes indigestion in many. It has an aphrodisiac effect and tends to immorality. Causes in many a morose disposition and want of interest in things around them.

46. Injures the constitution as well as mental faculties.

47 and 48. No.

49. Yes.

51 to 57. Not known.

58. I am not acquainted.

59. Cannot say.

60. Not known.

61. No charas.

62. Should be controlled.

63. Retail.

64. Not known.

65. Might be taxed, as it is so much sold in bazars.

66. Should be taxed according to the popularity, as it is grown in the district.

67. The cultivator and the vendor who buy the drugs from the cultivators should be taxed.

68. There are. They should be inspected more frequently.

69 and 70. Not known.

98. *Evidence of* SURGEON-MAJOR R. PEMBERTON, *Civil Surgeon, Cochin.*

14. I have made enquiries, and find that ganja and bhang are the only products of the hemp plant in the Cochin State, and is used to a very large extent in British Cochin by the Konkani. It is principally used in the larger towns in the native Cochin, especially in Muttancherry.

15. *Smoking.*—The cultivated plant is used; the leaves are well washed, cut into small pieces, and mixed with an equal quantity of tobacco, and smoked either in a pipe or made into a cigarette.

Eating.—The flowering tops are washed, dried in the shade, reduced to a powder, mixed with an equal quantity of rice, flour, sugar, and spices, added and made into chappaties and baked and used as bread. A confection is also made with sugar and spices.

Drinking.—The leaves and flowering tops are ground and made into a decoction and flavoured with sugar, milk, and spice and used as an ordinary drink.

16. Bhang is generally prepared by the people in their houses.

17. In this district by the Konkani, banias, fakirs, and especially amongst the lowest of these classes.

18. Ganja and bhang deteriorate by keeping, unless kept in well stoppered bottles.

19. Ganja is used both for smoking, eating, and drinking. This applies to the Cochin State.

20. In British and Native Cochin, Konkani, fakirs, banias and the lowest classes of these different sects use the drug.

21. The flat nor the round are used; but the leaves and tops are pounded and used with an equal quantity of tobacco.

22. None here.

23. Bhang is smoked by the classes enumerated in paragraph 20. Ganja and bhang are used here for smoking, eating, and drinking.

24. Already referred to in paragraph 20.

25. I do not know.

27. Principally from the poorer classes, and those who are unwilling to do an honest day's work. Mendicants use bhang a good deal.

29. Ordinarily tobacco is mixed with bhang and ganja, and occasionally dhatura seeds. The object in using the latter is to increase the intoxicating effects of the drug.

30. The drug, as in the case of other intoxicating drugs, is used both in company and solitude. It is principally confined to the male sex. It is not usual for children to use it.

31. The habit of consuming the drug is easily formed and difficult to leave off, and the tendency in the majority of cases I have known is to gradually increase the quantity.

34. It is, I think, impossible for consumers to forego the consumption of the drug. If deprived of it, they are sure to take opium in some form, and, if unable to get this latter drug, to drink arrack, etc., mixed with the seeds of dhatura and some other similar drug.

35. It would not be feasible to prohibit the use of the drug, especially in the case of the regular consumer. He would feel the want of it as much as a man who is deprived of his tobacco or his glass of beer.

40. Yes; native doctors use the drug in medicinal doses very frequently, and it is also used in the treatment of cattle diseases.

41. Yes; acts as a stimulant after exertion and exposure and alleviates fatigue. Is used very often in asthma and in painful rheumatic affection. Native doctors prescribe the drug in these cases in moderate doses and is used in painful affections very often instead of opium.

43. No.

45. (b) and (c) Yes.

(d) No; relieves asthma.

(e) Yes; certainly.

(f) Yes; in large doses, especially to those who are not accustomed to take the drug regularly. The insanity is generally of a temporary nature, lasts a few hours, and the symptoms would be re-induced in the case after liberation if the drug was again taken in excessive quantity. The insanity in these cases is a fit of delirium, and while it lasts, the man is not answerable for his actions.

49. Yes; it is sometimes used as an aphrodisiac. I have known prostitutes using it. It must tend to produce impotence.

53. Yes; I knew one case in which a sepoy in a regiment in Burma, who was addicted to smoking bhang, after an excessive dose run through the lines cutting down every one he met with a knife. This excitement lasted for about half an hour. He was caught, and appeared to know nothing of what occurred.

Oral evidence.

Question 1.—I am fifteen years and nine months in service. I have been in civil employ continuously since 1885 in the Madras presidency. For the first eighteen months of my service I was Civil Surgeon in Burma. I have had no special experience of insanity. I was never in charge of a lunatic asylum. More than one-third of the information I have given in my answer has been derived from enquiries made from Europeans and natives in Cochin. The subject of hemp drugs had never been specially brought to my notice till I was asked to reply to the Commission's questions.

Question 34.—I can mention no other drug but dhatura which is capable of being used as a substitute for the hemp drug.

Question 45.—My answer is based on experience gained on service with troops and during my civil employment in Ganjam between 1887 to 1889, where the drugs are consumed to a large extent. This explanation relates to the whole of my answer, none of which is based on Cochin experience. I have observed the effects described in this answer in the persons of sepoys. An habitual ganja smoker was always known in the regiment; but I could not tell that he had the habits from his appearance. Such men were much more frequently in hospital than other sepoys. The cases were entered in the case books. The probable cause of their illness was not entered; it was so well known. I have never known of a man being punished for using hemp drugs. A man is not liable to punishment merely for the use of ganja. When the persons I have been speaking of were admitted to hospital, I was in the habit of examining them particularly in order to ascertain if their illness was

due to ganja. If it had been, I should have reported them. I never reported a man, because I was never certain that his illness was due to ganja. The cause of illness is always entered in the cause book, with a view to judging of a man's qualification for pension. Ganja was, nevertheless, never entered for the reason I have already stated. My statement regarding insanity caused by ganja is founded on two cases within my own experience. It is only the excessive use which, in my opinion, causes insanity. A ganja smoker usually smokes once or twice a day, and I call that a moderate use. If he indulges to a larger extent, I should call his habit excessive. I cannot give the weight of ganja represented by such moderate use. I call it temporary insanity, even though the insanity lasts a few hours only. There is more violence in such cases than is consistent with the state of intoxication. In one of the two cases I have referred to, the insanity lasted only one hour; in the others, three or four hours. In the former case the man had had a previous attack of temporary insanity from the same cause, as I ascertained afterwards. In both these cases I am confident that the insanity was due to the hemp drugs and nothing else. In the case which lasted only an hour the man was brought to me in a state of doubtful sanity to the Detail Hospital, which was in my charge. He was cured in two or three days, but still under observation, when the orderly gave him some ganja. From the effects of smoking this he was attacked with a fit of temporary insanity, in which he stabbed the orderly. He spoke to me quite rationally a short while afterwards, saying that he had stabbed the orderly because he would not supply him with a sufficient quantity of ganja. I made enquiries, which satisfied me that the condition in which the man was when he was first brought to the hospital was due to ganja. This information was given to me by the native officers, who said that he was frequently excited, and that his excitement was caused by ganja. He was transported for life by a civil tribunal, the Sessions Judge of North Arcot. The case occurred between 1885 and 1887. The orderly was not killed. The enquiry I made satisfied me that I had correctly ascertained the cause of his insanity, because he was quiet while under observation at the hospital. He was sent to the hospital, was violent, and therefore

kept apart for some days. But he there became so quiet that I admitted him to the general ward, only telling off an orderly to watch him. I excluded all other causes of insanity. I gave evidence before the Magistrate who came to the hospital to take the wounded man's dying declaration. I was under orders of transfer, and as Dr. Lancaster had taken charge and knew all about the case, he appeared in court in the subsequent proceedings. I do not remember deposing to the state of the man's mind. I did depose about the nature of the wounds. I did not enter anything about hemp drugs in the case book, because I was not certain whether the man was insane or not. I never certified him insane because he was under observation all the time he was in my charge, and I gave over charge of the hospital on the day the offence was committed and left the station the same day. When the offence was committed, the native officers came on the spot and said the man was a ganja smoker and excitable. I also knew that he had been supplied with ganja, and he alleged the want of a sufficient supply of ganja as the reason for committing the offence, and I was therefore satisfied that his insanity was caused by ganja. I did not enquire about hereditary insanity. I saw him within an hour after the attack, and he was then quite sane. I don't think it was a case of mere rage, because if it had been, I think the fit would have lasted longer. But it is difficult to express the difference between the two things. If there had been no ganja history, I should not have described such a fit as insanity. I cannot say why I should not have done so, except that, apart from the ganja history, there was no proof of insanity.

In the second case to which I have referred, it was known that the man had taken ganja just before he committed the crime. It occurred in Burma. I gave evidence, and the man was transported for life. I gave evidence that the man was sane. The case was tried in the Sessions Court in Tounghoo between 1881 and 1883. I gave evidence that the man had smoked ganja; that he had injured the two men; and that when I saw him two hours afterwards he was quiet and in his senses. This is the case referred to in answer to question 53. These are the only cases of insanity that have come under my personal observation.

99. Evidence of SURGEON-MAJOR A. J. STURMER, *District and Sanitary Officer, Masulipatam, Kistna District.*

1. Enquiring of natives and from employment in the Military and Jail Department, and having had charge of an asylum.

2. Bhang and ganja are the names used chiefly in this presidency.

19. Ganja is used chiefly for smoking; it is also made into a sweetmeat.

29. This is said to be composed of bhang, pepper, milk, poppy, aniseed, cocoanut, plantains, ginger, water, and subza or "ryana" seeds.

30. Generally alone, but a pipe is often passed from one to another. Parties are occasionally given for the smoking of ganja. Almost entirely confined to the male sex. Majum is given to children for diarrhoea, and when they are going to be circumcised. It is a sweetmeat which contains ganja or bhang.

31. Easily formed, very difficult to break off, and in time usually leads to excess.

36. As people get more wealthy, they take to alcohol. Ganja or bhang is very cheap, not so alcohol.

40. The smokers say that it is good for diarrhoea.

41. I do not think it is beneficial in any way, but (a) it certainly increases the appetite, (b) and people doing arduous work state that a whiff or two make them forget fatigue. No doubt it may keep them going for the time being, but the after depression is worse.

42. I consider them harmful, because people cannot restrict themselves to the moderate use. A person in health does not require them more than he does alcohol or opium.

44. I have never seen a person who has eaten ganja, etc., and watched the effects on him, but I have seen people some time after eating or smoking it who were not accustomed to its use, and they were then in a frenzy, almost maniacal.

45. In time, I believe, it leads to mental and

moral degradation. It lowers the brain power. No; on the contrary, increases the appetite considerably. Yes; those who get habituated to its use usually give up work. This is the case in this presidency; in the north all the dooly-bearers take it as far as I know. Yes, it causes acute mania, which is usually temporary first. A person who enters an asylum has to stop the drug, and he begins to improve; when he leaves, he generally reverts to the habit and comes back worse; in time, I think, his brain gets into a state which can never improve. I think it is the exciting cause of insanity. Yes; many used to say that they took ganja.

There may be isolated cases where this would apply, but in the vast majority it is an easily learned vice, which a person may not be strong-minded enough to refrain from. It is a question whether a drunkard (alcoholic) or a ganja smoker is not a weak-minded person. I look upon both these as men with weak intellects; they know alcohol and ganja are very bad for them, yet they will not give them up.

46. It is difficult to draw the line; moderation passes into excess imperceptibly. Many of my answers apply perhaps more to the excessive use than to the moderate.

47. The son of a ganja smoker, etc., generally is said to take to the drug, but not the daughter.

49. It is said to be a powerful aphrodisiac, but I have had no acquaintance with it under this head. I have often given it to patients who have experienced the general symptoms, but never this. A ganja smoker tells me that whilst taking ganja he has no desire for women.

Oral evidence.

Question 1.—I have been nearly nineteen years in the service. Out of this I have been about fifteen in civil employ. I had charge of the Waltair Lunatic Asylum from 1885 to 1890. This is my only special experience regarding insanity.

Question 42.—I have experience of the moderate use only in this respect, that certain bad characters in a regiment are said to be ganja consumers. As they do not get excited, I conclude that they are moderate consumers. I know no moderate consumers among the outside population. The sepoys I refer to did not, so long as they were under my observation, become excessive consumers. My statement as to the impossibility of restricting the habit is based on the replies given to my inquiries by certain smokers whom I questioned in preparing my paper. They seemed rather ashamed of the habit. They said they would give it up if they could, but that the tendency was to increase. People seem generally ashamed of the habit in this part of the country, and my experience is consequently limited. I have seen only few smokers.

Question 44.—One case was in the jail at Rajahmundry. A dhobi suddenly became excited. He was ordinarily a quiet character. I went down to him and found him very violent. He kicked at me. Ganja and opium used to be found some times on prisoners. The man afterwards said some one had given him something to eat. The jailor said he believed it was ganja. He did not see it, neither did I. I concluded it was ganja, because I found nothing else that it could be. They said that it was ganja; the jailor did. But he never found any ganja. I do not think any thing else would cause mania like this. I cannot say how long the symptoms lasted. I began to treat him. I gave him the stomach pump. I found no leaves or

smell of the drug. This outbreak occurred at 3 p. m. Next day he was all right. I found no evidence of ganja, but I concluded it was ganja. I used the stomach pump, because there was some warder or some one said something had been eaten. The man himself after recovering said he had never taken ganja before, and that he did not know it was ganja he was eating. This was in answer to an inquiry of mine as to why he had taken ganja. What led me to speak of ganja was that I knew of no other thing that would produce this excitement. I did notice the condition of the pupils. The body temperature was not taken. The man fought so tremendously that we had to have about six men to hold him. The symptoms are like the case of very acute mania. I know nothing about transient mania. I have never seen a case.

My second case is of a recruit boy in the 21st Pioneers at Secunderabad in the end of 1891 or beginning of 1892. He was brought into hospital about 11 or 12 at night. I was not called to see him; but the Hospital Assistant described the same kind of violence as in the dhobi's case. I saw him about 6 A. M.; he was sleeping. I saw him a few hours later, and he was quite sensible. He had been quite out of his mind, they said, and required several men to hold him. A sepoy had given him something to drink, the boy said. The boy had just joined. He was eighteen years old. I had no evidence of what the thing was. I could not find out. But the Hospital Assistant and I agreed that it must have been hemp in some form. I cannot say when it had been administered. I asked if the boy had been drinking. They said there was no smell of drink. I did not ask about the smell of ganja. No emetic was given or stomach pump used; he was simply held down. I believed it was ganja, because there was no smell of liquor and no headache, but eyes bloodshot. This symptom of bloodshot eyes also appeared in the dhobi's case. I don't remember anything being noted about the pupils. You see no evidence was particularly taken. The boy would not point out the sepoy that gave him what he took. No doubt ganja and drink were taken largely in Secunderabad.

I have never seen a case in which frenzy has resulted from smoking. The above are the only two cases within my personal knowledge on which I base my answer No. 44. Both had taken the drug for the first time.

Question 45.—I have never been into the question of ganja. I never see it scarcely. My first sentence is based on what a ganja smoker said. He said, "It is a bad thing. I should like to leave it off; but I cannot."

I have really no experience as to effects of either moderate or excessive use, except what I have seen in lunatics in the cases shown above, and in other cases in which I have been told regarding sepoys that they smoked ganja, though I have not been able to verify it or get them to acknowledge it. The man who was found getting ganja in the Chin hills in a parcel from his mother may certainly be confidently regarded as a smoker. He was a worthless man who never did any work.

My second sentence is based on asylum experience. I thought that as many insanes confessed to the use of the drug, it was probably one of the causes of their loss of brain power. There was only one case of lunacy that I can recall absolutely attributed to ganja during my five years at Waltair.

My fourth sentence is based on sepoy experience of cases in which it was generally believed that

men smoked ganja, and they were men who did their work indifferently. On the other hand, I found dooly-bearers who had ganja smoke marks on the hands. These men work well, and are hard worked. They said they took whiffs every now and again to keep them up. Yet the impression regarding sepoy here is that a man who takes to ganja is lost. It may be because the dooly-bearer takes it to help him to do his work; while the sepoy, though knowing it to be contrary to military order, takes it because he has depraved tendency. I have always understood that a man taking ganja in a regiment is liable to severe punishment. It is so dangerous in a regiment to have a man excited by a drug. I think there is a regulation against all intoxicants read out to recruits on joining.

In regard to mania, my remarks are based on my Waltham experience. I cannot say how many hemp drugs cases passed through my hands, *i. e.*, how many there were in which ganja was said to have helped. Only one case was absolutely ascribed to ganja. I think that in this case it was the exciting cause. He was admitted twice. He admitted the

use of the drug. The drug causes mania—acute mania. I never noticed any special symptoms. The man is like the ordinary maniac. The mania only differs from that due to other causes in not being so lasting. I have not been in the habit of discriminating between the moderate and excessive use of the drug. In my hemp drug cases I arrived at the cause chiefly through the evidence of friends. Generally one of the first questions one asks is, “Does he take ganja?” Answer—“Yes.” Question—“Much?” Answer—“Yes.” The mere fact of the admission of the habit would lead to the entry of the words “ganja smoker.” This would be the entry whether the admission was made by the lunatic or the friends. If this admission were made, and there was no other cause assigned, the medical officer, as Civil Surgeon, would probably enter the insanity as due to ganja. The Superintendent of the Asylum would probably accept this, if he found it in Statement C, without any question. Given heredity and ganja in Form C, I should enter in the register “Heredity helped by the habit of ganja smoking.” And in the annual tabular statement the case would be shown under “Heredity.”

100. *Evidence of Civil Apothecary T. M. CHERIYAN, Manantoddy.*

14. (a) Yes.

(b) and (c) No.

It is generally used in Wynaad by many classes of people, such as Nairs, Rajputs, and the jungle tribes, Paniars, Kurichers, Kurumbers, Kaders, etc., and they grow the plant each one for his own use. It also grows wild to a great extent in certain parts of Wynaad, such as Sultan's Battery, etc.

15. The dried flowering tops with the smaller leaves called ganja is the only preparation used about this locality. The plant is cultivated and also grows wild. These dried flowering tops with the smaller leaves are mainly used here for smoking. The same made into a confection or electuary with opium, and spices such as cardamom, nutmeg, cloves, cubebs and sugar or honey is also used. This latter preparation is very rarely used, only well-to-do people being able to make it on account of its cost. The form in which ganja is most commonly used is as the dried flowering tops and smaller leaves for smoking. Some people, especially the Rajputs, grind the ganja and mix it in milk and add sugar and drink it.

16. Bhang is not prepared here. The forms in which the products of the hemp plant are used here are as mentioned above.

17. Preparations of the hemp drug are only made by those using it, *viz.*, those enumerated above in answer to question 14.

18. Yes, ganja loses its effects by keeping. With ordinary care it will not keep good longer than one year in Wynaad on account of the damp and moist atmosphere. If kept long it is liable to become mouldy and then it is useless. When kept well covered and placed in a warm part of the house it keeps good for about a year; otherwise it soon becomes mouldy and useless. Alcoholic extract and tincture will keep good for years.

19. Only ganja (the dried flowering tops and the smaller leaves) is used here. It is used mostly for smoking and sometimes for making the confection aforesaid (in answer to question 15),

and also for grinding it and mixing it with milk and sugar for drinking. This preparation of ganja in the shape of a drink is taken chiefly by Rajputs.

20. By many classes, Nairs, Rajputs, Kurichers, Kurumbers, Paniars, Kaders, etc., ganja is used. No charas is used here at all and none made. The ganja is mostly used for smoking.

21. All three kinds are used for smoking, but the round variety is preferred.

22. No charas is used here at all.

23. No bhang is used here for smoking.

24. No bhang eaten or drunk here.

25. It is said to be on the increase owing to the dearness of arrack.

26. Excessive consumers, either habitual or occasional, are extremely rare, but there are many moderate consumers, habitual and occasional.

27. In some cases of diseases it is used, and thus the practice is acquired. In others it is taken merely for its intoxicating effect.

28. To habitual moderate consumers about $\frac{1}{4}$ oz. of ganja is required daily for smoking, and to habitual excessive consumers about $\frac{1}{2}$ oz. of ganja. The cost is very little or nothing here—about 3 pies per diem for the moderate consumer and 6 pies for the excessive consumer.

29. For smoking, tobacco is generally added to heighten the effect of ganja by all classes of consumers. Dhatura is not used here. No such preparation as bhang massala is sold here.

30. (b) The use of ganja is mainly confined to the male sex and to grown up people of that sex.

(c) No.

31. Yes the habit is easily formed, but it is not very difficult to break off. The moderate habit is very likely in many cases to develop into the excessive.

32. No custom, social or religious, prevails here in regard to the consumption of these drugs.

33. (a) It is generally held in disrepute owing

to its intoxicating effect. Nevertheless, it is very largely used.

(c) No.

34. No.

35. It would be difficult to prohibit its use.

36. No.

38. The round kind is more used than the other varieties, owing probably to the fact of its being more powerful in its effects.

39. The use of the hemp plant in any form, except in cases where it is required for medical treatment, is highly injurious.

40. Yes, it is used by some native doctors in diarrhoea, colic, cholera, etc. It is also used in the treatment of cattle disease.

41. The moderate use of bhang can in no way be beneficial.

(a) It has, however, the property of creating an inordinate appetite by means of which those who take it are enabled to eat a large quantity of food; and therefore they are sometimes able to go without food for a long time after.

(b) It does give some temporary staying-power till the effects pass off, when the consumer becomes dull, lethargic, and apathetic.

(c) No.

(d) No.

42. No, the use of any of the drugs is not harmless. It causes several diseases and disorders.

43. Yes, generally.

44. Primarily stimulant, then sedative and narcotic. It also causes thirst, dryness of the throat; inability to fix the attention on one subject. It produces intoxication. It allays hunger in the habitual moderate consumer. It creates excessive appetite in one newly using it. The duration of the effects depends on the quantity taken or used. The effects of small quantities last three or four hours, and of larger quantities longer. After-effects, a feeling of exhaustion. The want of subsequent gratification produces uneasiness.

45. Yes; the habitual moderate consumer becomes lean and reduced in body, and it makes him dull, apathetic, and disinclined to exertion. It also deadens the intellect. It does impair the constitution in several ways. It injures digestion and appetite. It causes bronchitis and asthma. It induces laziness. It deadens the intellect and produces idiocy.

46. All the above ill-effects of the moderate habitual use of any of these drugs will also result from habitual excessive use, but in an enhanced degree.

49. (a), (c), and (d) Yes.

Oral evidence.

Question 1.—My native place is Travancore. I am a Syrian Christian. I studied at the Medical College, Madras, and obtained the diploma of Civil Apothecary. I have been over nine years in the service. I have had no special experience in insanity.

Question 14.—My statement about the growth in Wynaad is based on report. I have been in Wynaad, but not in places where ganja grows.

Question 26.—I have not enough of experience to give definite proportions. I have not seen any excessive consumer either smoking or drinking at Manantoddy. Smokers there are chiefly labourers who take a smoke of ganja and tobacco before going to their field work. Sometimes, but very rarely, a sweetmeat is eaten. Bhang alone is not eaten.

Question 29.—I think that though tobacco is weaker than ganja, the admixture of the two poisons makes each stronger.

Question 41.—My statement here is only based on report, not on experience. I have never seen cases in which such effects have been produced by the moderate use of bhang. It is from people who have used it that I have heard this. In reference to answers 23 and 24, I should say that there I mean the dried leaves known as bhang. These are not smoked, nor eaten, nor drunk alone. Nor is the drink described in answer 19 taken in this district.

Question 45.—All the statements made here are based exclusively on hearsay. I have not seen any of these ill-effects myself in my practice. At College I learned that half the insanity of the country was due to hemp drugs; but I have not been able to verify that myself. I have had no experience. I have not seen a case. I do not know of any case of illness that has come before me, of any kind, being due to hemp drugs. I never had my attention directed to the drugs or their effects.

I have a position somewhat similar to that of a Civil Surgeon and have had three cases of insanity sent to me for observation. In all three cases the insanity was hereditary.

101. Evidence of Apothecary K. VASUDEVA RAO, Brahmin, Adirampatnam, Tanjore District.

1. I have had opportunities of treating a few cases of illness brought on by the use of ganja.

19. People of the north settled in Bellary district prepare a kind of beverage called *ramras*, the chief ingredients of which are ganja, milk, sugar, and some aromatics. The drink is used on festive occasions to produce a pleasurable sensation.

20. As far as I am aware, ganja or any other preparation is seldom used in the southern districts of the Madras presidency. I have seen many pilgrims from the north smoke it. A small proportion of the lower classes uses it in Bellary district.

32. *Vide* answer to No. 19.

33. The use of hemp in any form is in disrepute among the people in general of the Madras presidency on account of its injurious effects on health.

40. Many native doctors use the drug along with others as an aphrodisiac. A few of them use it in severe forms of dysentery.

41. I think not.

43. I think they are querulous, if nothing worse.

44. A moderate use of the drug causes a refreshing and pleasurable sensation, enables the consumer to withstand hunger and fatigue for

four or five hours, and is followed by depression proportionate to the quantity consumed.

45. Once I was called in to see a bairagi, head of a religious endowment. He was a habitual smoker of opium and ganja. He was a ghastly skeleton of bones covered with the skin. As for his mental condition, he was then engaged in litigation. I have no information of his morals.

A boy of about fourteen was one night picked up unconscious by the police from the street. The next morning he was found to be a perfect imbecile, unable to articulate any other words than ganja and fire. He could not recollect even his own name. The previous history of the boy was not known to trace his mental condition either to heredity or to ganja, of which he was smelling when first seen. The formation of his head seemed quite natural. There was an intense craving for the drug. There was no information available as to the daily quantity used. Probably it was excessive, judging from his condition when first found.

49. Yes. *Vide* No. 40.

53. Some time ago I had to see a person who had used a preparation of hemp for a week or ten days as a sexual stimulant. He became a melancholic with repeated attempts at suicide.

In another case the person had used the drug, or rather a preparation of it, for a similar purpose for about a month. While using the drug, his friends observed some strangeness in his manners. Then came a rude mental shock, ending in violent mania with homicidal tendency. The malady gradually assumed a chronic form, carrying off the patient in a couple of years. During his insanity he would frequently talk of the drug, and sometimes would ask for it.

Oral evidence.

1. I studied at the Madras Medical College, and obtained the certificate of L. M. S. in 1887. I served for three years in the Bellary district and three years in Tanjore. I have had no special experience of insanity or any special training in that branch of medicine. The cases I refer to were at the dispensary and in private practice, and they are described more in detail in answers 45 and 53.

45. I did not treat the bairagi. I only saw him once, and apart from his own statement that he was an habitual smoker of opium and ganja, I learnt nothing whatever of his history. I cannot therefore judge whether his condition was due to other causes than the habit he confessed to. The only reason for mentioning his case is his emaciation, which may or may not have been due to opium and ganja.

The boy of fourteen I sent to the Madras Lunatic Asylum. The case came to me at Adoni in the Bellary district, when I was in charge of the Municipal dispensary. The Magistrate sent the boy to the lunatic asylum on my report. He went direct from Adoni to Madras. I drew up the necessary documents. The case occurred in 1888. I don't remember at the moment what cause I entered in the certificate.

53. The first case in this answer was a patient in my private practice. He had swallowed a dose of patent medicine with the object of committing suicide. I was called in, and was told by his friends that he had been taking a preparation of hemp as an aphrodisiac. I don't know what the preparation was composed of. The patent

medicine was one for treating scorpion sting, and quite distinct from the aphrodisiac. The patient had previously attempted to commit suicide by throwing himself into a well. I was told he had been out of his mind for three or four days before I was called in. He was under my treatment, as well as I remember, for about a fortnight, and recovered completely. I treated him for the poison and not for melancholia. He was impotent by his own statement, and had been in that state for four or five years. He was about 30 years of age. He said the preparation of hemp had had no effect, and he had increased the dose because it had proved inefficient. He was talking nonsense when I first attended him. Though he recovered from the poisoning he did not regain full possession of his will till a month after I first attended him. I knew him before he began to take the hemp drug, and his ultimate condition, after he recovered, was the same as that in which I formerly knew him. I made his acquaintance three or four months before he began to take the hemp drugs. He was then living with his family, consisting of mother, wife, brother and sister. I have not known the suicidal tendency to show itself in persons who supposed themselves impotent. His relations, whose acquaintance I made, were sound in intellect. I do not remember enquiring into the history of the patient's family further back than his father, who, I learnt, was a respectable man. I made no other enquiries as to the cause of insanity. The use of the hemp drug was the one fact mentioned to me, and I accepted it. As well as I remember, he had a daughter 6 or 7 years old. I know insanity arises from other causes than ganja, and therefore I think I must have made enquiry whether the insanity was due to other causes than ganja, but the use of the hemp drug was the only fact which made an impression upon me. When I said that I made no other enquiry as to the cause of insanity, I meant no other enquiry regarding heredity. The hemp drug could not have been the only fact mentioned to me, but it was the fact which appeared to me to furnish an adequate cause of the insanity.

I do not remember now if I made any enquiry into the cause of insanity. As far as I was concerned, it was a case of poisoning, and I did not treat the patient for insanity. I knew the members of the patient's family, and had already learnt that the father was a respectable man. There was therefore no reason for me to enquire about them, and as well as I remember I did not enquire.

The person, the subject of the second case described in 53, was brought into Adirampatnam to his brother, a Salt Inspector, whom I had known for one month previously. The man was insane when he was brought in, and I saw him within two or three days of his arrival. During the next month or so I saw him four or five times. He was always in the same condition. The Salt Inspector was then transferred, and took his brother away with him. I heard of his subsequent history. I asked the Salt Inspector the details of the case, and he told me what I have stated in my answer. The hemp preparation was said to be one of the aphrodisiacs commonly prescribed by the native doctors, and I was told that the mental shock was caused by a letter impugning the character of his wife. I don't know how the Salt Inspector got information about the insane's history previous to his arrival at his house. I did not make any enquiry into the cause of insanity beyond asking the Inspector whether the patient was insane from his birth or how, and the Inspector told me of his

having used the drugs for the purpose described and of the mental shock. I never treated the man at all. I never myself heard him talk of the drug. When brought into Adirampatnam he had been insane for a year and living at Tuticorin away

from his brother. During that time I had not seen him, nor had his brother, the Inspector, seen him. I do not remember from whom I heard of his death, for I did not keep up any knowledge of him.

102. *Evidence of Apothecary G. A. W. VELLONES, Chetambaram, South Arcot.*

1. By inquiry, and knowledge of a few hemp eaters and smokers.

2. Locally known as ganja.

3. Not abundant here. A few plants are reared in back-yards of *madams* and in some private compounds for medicinal use. Grows wild over hilly tracts about Salem.

6. It is reported to grow wild and dense.

7. A few plants in back-yards are cultivated for smoking ganja, but the bulk of the drug for public use is imported.

10. The few people who cultivate it here to a very small extent are ascetics living retired lives in *madams*.

11. Yes.

14. Yes; for private use, for smoking, and to a very small extent.

16. It can be prepared, though it is not generally done, as it is troublesome to prepare and costly. Charas is not well-known here.

17. Native doctors for medicine, and ascetics for smoking.

18. Deteriorates by keeping. If properly prepared, it is said, will keep for a year good.

19. Ganja is used in this town for smoking. It is also taken internally, prepared as a confection with aromatics.

20. The lower classes, and apparently Muham-madans, smoke ganja.

21. Flat.

24. Of the general public, a very small proportion drink it. Pandarams, bairagis, etc., for the most part use ganja freely, as bhang is costly.

25. I believe it is on the increase.

26. (a) More than 70 per cent. Under (b), 10 or 15 per cent.; and a very small proportion under (c) and (d).

27. Working classes, wandering classes, and those in low condition. Other well-to-do classes resort to it for its aphrodisiac properties.

28. (a) Quarter to half an anna.

(b) Half to one anna.

29. Carminative and honey or jaggery generally.

30. Male sex smoke in company, but eat it in private. Neither females nor children resort to it.

31. Yes; difficult to break off. Not much tendency to develop into excessive, as it at once disagrees.

33. There does not appear to prevail any social or religious custom necessitating the use of the drug here. It is taken for its slightly intoxicating effects.

34. Yes; it would. It acts as a mild stimulant and intoxicant, which enables people addicted to it to get on with their work. There is a general indisposition and disinclination for work in case the drug is withheld.

35. Though it may be feasible to prohibit the use of the drug, it is sure to be consumed illicitly, and resort would be had to other intoxicants.

36. The more well-to-do classes resort to alcohol.

37. Ganja only is smoked here, and, in excess, is injurious to health.

39. Smoking is more injurious than the use of purified ganja or opium.

40. Yes; it is used medicinally for human beings as also for cattle.

41. It is reported, and appears, to be beneficial in small doses. Moderate habitual use is referred to. Ganja is locally used. It is reported as digestive and possessing staying-power. The labouring classes and moderate habitual use are referred to.

42. Moderate use beneficial to certain classes.

43. Inoffensive.

44. Slightly intoxicant, with pleasurable feelings; rather tends to quiet the individual than excite him. It is said to create appetite. Its effects last two or three hours. Depression follows, and desire for more ganja.

45. (b) Slightly.

(c) and (d) No.

(e) I think it impairs the moral sense and induces laziness in some.

(f) Some cases of insanity are reported as due to the drug.

46. They are very injurious in excess, and produce general breaking-down of the constitution.

47. Hereditary in some cases; acquired by living or mingling with consumers in most cases.

49. It is; by men, not by females. Used thus it is injurious, as it tends to cause dyspepsia.

51. Consumers are generally peaceful men.

53. No.

55. Possible and reported. Stupefaction sufficient for purposes of ordinary theft.

57. Ganja-eaters for the past twenty years and more, in moderation, tell me that they are better taking it, and would fall ill without it.

68. There is one shop licensed to sell ganja in the main street of this town.

69. The wishes of the people are not consulted, and there seems to be no necessity for it, as the drug is sold to purchasers, who take it away with them or swallow it, and at once leave the bazaar.

103. *Evidence of Apothecary N. H. DANIEL, In charge Police Hospital, Koraput, Vizagapatam District.*

3. Ganjam district—abundant in Parla Kimidi; Vizagapatam district—abundant in Devarapulli and Madugole.

4. Gnanapatri, Bhasavapatri, Serlavathi, etc.

5. Soil red; rain little or none; elevation about 2,000 feet above the sea.

6. Scattered.

10. Agricultural cultivators, more particularly the vegetable-sellers (kurakkabi).

12. Specially cultivated to a fair extent in Dugapa (Godavery) for the production of ganja and bhang.

14. Ganja and bhang to a small extent in Koraput and Jeypore.

15. The leaves of the plant are twisted with the twigs and seeds, and are afterwards collected, dried in the sheds, and then exposed to the influence of dew at nights. They are then placed one leaf above another, covered with straw, and made into a mass by means of heavy weights placed above. A small quantity of this, well rubbed on the palms of the hands to separate the seeds, is used for smoking. Mixed with milk, spices, etc., it is drunk. Mixed with sugar, some people chew it also.

16. On rare religious occasions. Bhang is prepared from hemp wherever grown.

17. Ganja by the lower classes generally; bhang by the Uriya people on religious occasions.

18. Exposed to air they deteriorate. If preserved, bottled and stoppered, they keep good.

19. No. Ganja is made into majum, and eaten by most people in Madras, Vizianagram and Jeypore.

20. All bairagis smoke ganja throughout India. A few Muhammadans and fakirs in Kurnool and Cuddapah.

21. Flat.

24. The majority of the Uriyas and the Rajputs on religious days. In the Ganjam district, Jeypore and Rajputana.

25. On the increase, one man imitating ganja from another. This is borne out by people of Koraput.

27. Vagabonds from idleness and want of any definite occupation.

28. (a) One and a half tolas weight, worth quarter anna.

(b) Six tolas weight, worth an anna.

29. Ordinarily tobacco. Yes, to make it more intoxicating, poppy-seeds, spices, pepper, sugar, etc.

30. (a) In company more.

(b) Adult males.

(c) No.

31. (a) Yes.

(b) No.

(c) Yes.

32. (b) No.

(c) Temperate.

33. (a) Mean.

(c) No.

34. No; if the consumer is given a cigar when he craves for ganja, the cigar seems to quell him.

36. No, because alcohol is dearer in every way.

38. In kind the same.

40. A general term in the form of confection (Mathanakamiswaram) and aphrodisiac.

41. (a) No.

(b) Yes.

(c) No.

Vagabonds. The latter.

42. It is harmful (see below).

43. No; when consumers run short of money to procure the drug, they commit small thefts, etc.

44. (b), (c), (e) and (f) Refreshing, producing intoxication, and exhilarating his spirits and bringing on appetite. Undue depression results in the end.

(h) Yes.

45. (b) Yes.

(c) Yes.

(d) No.

(e) Yes.

(f) It dulls the intellect, producing temporary insanity of a melancholic character; the insanity subsiding with the discontinual of the drug, and reappearing when the drug is again resorted to.

46. The habitual excessive consumer is dull, dirty, and ill-clad; the eyes protrude, cheek bones prominent, the body thin and emaciated, with a pale sallow complexion. Insanity of a temporary nature and melancholic in character has supervened in many instances.

47. No.

48. The children of habitual excessive consumers are weak and debilitated, and do not live long.

49. Yes; by men, not by prostitutes.

50. As an aphrodisiac, ganja should be condemned, the virile power failing altogether after a prolonged use of the drug. It tends to produce impotency.

52. When habitual excessive consumers have no money to purchase the drug, they commit small thefts, pilferings, etc. I know of one consumer who used to rob brass vessels of his neighbour and mortgage them for buying the drug.

53. Yes. I am told a case recently occurred in Jeypore. The consumer, who owed a few rupees to another man, hit him with a tongi without any premeditation, on the latter asking the consumer for his due when he accidentally met him in the road.

54. No; ganja makes the consumer a coward.

55. (a) Yes.

(b) Yes.

104. *Evidence of Apothecary MUHAMMAD ASADULLA, Ellore, Godavary District.*

1. My information is chiefly from people addicted to the drug.

2. Yes. Everything applies to this province with the exception of the word siddhi, which is unknown in this province. Charas is seldom or never procurable in these parts.

3. It is never known to grow spontaneously. It is extensively cultivated in a village called Daggupadu, a place 32 miles from Guntur, and in a place called Shamshabad in Hyderabad, and in Javadi near Madras.

4. In addition to the names mentioned by Dr. Prain, it is called 'barya tamacu' or green tobacco and also 'aushakani buti' or the drug of the theosophist or psychologist.

5. It is never known to grow wild within these parts.

6. Unknown.

7. Yes.

(a) Yes.

(b) No.

(c) Yes.

(d) For seeds and not for fibre.

In some of the villages of the Godavari and Kistna districts.

8. It is on the increase, and on account of a great demand for it the cultivation is also extensive.

9. Dr. Prain's remarks on this respect hold good in this part.

10. They don't form a special class. The majority of the cultivators of this drug are Muhammadans, although Hindus or Cummas also follow this example to some extent.

11 and 12. Not known.

13. (a) More or less common to all districts. Cultivation is restricted by taxation.

(b) Red and clay soil appears to be favourable to its growth.

(c) Not known.

14. Daggupadu, Shamshabad, Javadi.

(a) Yes.

(b) No.

(c) Yes.

15. The leaves of ganja are prepared for smoking by rubbing a quantity of it in the palm of the left hand about a dozen times, and squeezing out the green colouring matter and juice by mixing it with a little water. This process is said to deprive the ganja of its deleterious effects. The one used for eating and drinking is thus prepared. A quantity of ganja is first boiled and then ground in a mortar with water, and strained through fine muslin. This process is repeated half a dozen times when it is fit for use. This is mixed with treacle or milk which go to constitute respectively majun and bhang of these parts.

16. (a) Yes.

(c) Unknown.

17. Chiefly Muhammadans.

18. Ganja deteriorates by keeping. It becomes quite inert if kept for a couple of years. It is destroyed by a worm peculiar to it. Charas does not. It keeps good for a considerably long time. The

ordinary method of preservation appears to be to pack it up closely in a bundle, or the popular way is to keep it air-tight in a pot and expose it to the sun now and again.

Income (annual) = About Rs200.

Import 50 maunds.

Export—Nil.

19. Yes. No other use known.

20. Musalmans chiefly, and bairagis or hermits, and native soldiers for keeping off malaria.

21. The flat kind is prepared for smoking. Not known.

22. Charas is imported chiefly from Hyderabad, where it is appreciated by the nobles.

23. Yes. Occasionally in the absence of ganja.

24. This is done indiscriminately according to taste by Hindus and Muhammadans.

25. It is on the increase. Charas is seldom seen in these parts. Owing probably to the struggle for existence which is getting keener every day.

26. (a) Fewer.

(b) More.

(c) Few.

(d) Few.

27. This habit is met with equally among vegetarians and flesh-eaters, and among people of itinerant habits such as hermits and soldiers (native) who undergo hardships incidental to frequent changes of climate of the worst type possible.

28. (a) Three drachms : value one anna.

(b) One ounce : two annas or more.

29. Smokers use tobacco with it; eaters, aniseed, pepper, dry ginger, rose buds, poppy seeds, and sugar and milk, and plantains. Dhatura is never used in these parts. A mixture of dry ginger, aniseed, pepper, poppy seeds, sugar, plantains and rose buds.

30. (a) Seldom in solitude, but frequently in company.

(b) Very seldom indeed by the female. Usually from the eighteenth year or the age of adolescence.

(c) No.

31. (a) to (c) Yes.

32. It is condemned by religion, but sanctioned by usage. The habit is formed owing to a popular belief among the people that ganja is remarkably instrumental in acclimatising an individual to any climate or breaking him to the vicissitudes of life. A small beginning invariably leads to the formation of the habit.

33. (a) With great disfavour and disrepute, as it invariably leads to apathy, lethargy and ascetism, due probably to inanition or perverted nutrition, as the drug deadens or annihilates the sensation of hunger, and minimises to a considerable extent the necessities and much more the luxuries of life.

(c) None.

34. Yes. As those addicted to it are generally poverty-stricken, and some of them are of opinion by experimenting on themselves that it is a preventive of Beri Beri and decidedly curative of

malaria and obesity, for those that give up the habit get ascites and other dropsies. 400 Muhammadans. 200 Hindus.

35. (a) to (c) It would be feasible to prohibit its use in Southern India by preventing its cultivation and importation. It will be consumed illicitly.

(d) Yes.

(e) No.

(f) No. As other habits are comparatively very expensive and cannot be cheaply taken to.

36. No.

37. Charas is much more intense in its effects.

38. Very nearly the same.

39. Smoking is decidedly more deleterious to health, causing, as it does, great emaciation and desiccation of the system. Drinking and eating are to a certain extent conducive to health and strength if moderation be observed. These latter methods are on the whole said to be tonic in their effects. In drinking and eating the admixtures are very nutritive and luxurious.

40. It is used in these parts as a confection for its aphrodisiac properties by Mussalman native doctors. It is used as a stomachic and gastric sedative in almost all disorders of cattle.

41. (a) to (c) Yes.

(d) Not known.

No definite proportion can be given. Mussalman and Hindus are the chief classes. The majority are habitual moderate users.

42. It is injurious, if habitual, and although in moderation.

43. No.

44. (a) The immediate effect is refreshing and recreative.

(c) Yes.

(d) Yes.

(e) Creates inordinate appetite subsequently.

(f) Two hours.

(g) Gets up refreshed; after-effects are recreative and invigorating.

(h) The want of subsequent gratification produces listlessness and disgust for everything and a sense of lethargy and apathy.

45. (a) As far as physique is concerned, it is a decided anti-fat; and with regard to mind it is in the long run permanently perturbed, and permanent mental aberration to a greater or less extent invariably results. It certainly undermines morality.

(b) It causes emaciation if not combated by good nutritive diet.

(c) No.

(d) Causes bronchitis owing to enervation of the lungs, the air cells being constantly over-inflated by the smoke of the drug. It causes excessive or increased secretion of the bronchial sputa.

(e) It induces laziness, and by no means debauchery.

(f) It does so in course of time. Temporary. Yes the symptoms may be reinduced. The typical symptoms are singing, soliloquy, vociferation, laughing, no idea of dress. Occasionally they do confess to the use of the drugs.

(g) No.

Cannot give any account.

46. Cannot.

47. Yes.

49. (a) Yes.

(b) No.

(c) No; it is less injurious in this way.

(d) Excessive indulgence does result in impairing sexual power.

50. Cannot.

51. Only theft on a small scale.

52. Cannot.

53. It produces cowardice on the contrary, and makes one chicken-breasted and hare-hearted. No.

54. No.

55. Yes. But not so much as alcohol.

56. Not known. Not known in these parts.

57. Not known.

58. No improvement can be effected in the shape of excise, as those addicted to this drug are invariably from the lowest rung of the ladder and constitute the scum of society or the dregs of earth.

59. Not expedient, because it may probably lead to other deleterious habits, as opium and dhatura smoking as a *dernier ressort*.

60. I do not know anything about this.

61. No charas is produced in this province, as far as I know.

62. Not known.

Good manure is said to be serviceable for this.

63. The retail vend is expedient, as the users of the drug are usually poor or poverty-stricken.

64. None.

65. Reduction is advisable for reasons already assigned.

66. May be taxed alike, being indiscriminately used.

68. Yes, there are, but the drug is not consumed on the premises. The present system works well, otherwise it would not only be a hardship on its consumers, but would in a manner, though indirectly, encourage the use of the drug.

69. No; usually muttams and other public places of endowment are utilized like this. May advantageously be taken into account.

70. As far as my knowledge goes, there are none.

Oral evidence.

1. I studied medicine in the Madras Medical College, and got the certificate of Civil Apothecary. I have practised for five years. I was never attached to a Lunatic Asylum, or received any special training in lunacy.

25. The use of the drugs appears to be on the increase among the Muhammadans. The statement is the result of general observation, and not based on statistics. I must admit that the statement is based on limited experience.

34. My experience is gained at Guntur and Ellore. After getting the Commission's questions, I sent for ganja consumers at those places, and questioned them. My statement regarding the beneficial and preventive effects of the drugs is based on their answers, corroborated by experience gained in my practice at the dispensaries. I have also learnt something from books. As regards malaria, I have never known an habitual ganja

smoker to suffer from that disease. As regards the other alleged beneficial effects, I have no experience. I have never known a person who has given up the habit, and I am therefore ignorant of the results of deprivation of the drugs.

45. I have no notes of any cases in which the bad effects described in question 45 have resulted from the use of the drugs. I have, however, treated cases of asthma, bronchitis, and the like, which have resulted from prolonged use of the drugs. But I cannot recall any such cases.

I have seen a few cases of insanity from the use of the drugs, but cannot recall the details of any of them, as I have taken no notes. I remember two or three cases that were brought insane to the dispensary, but I don't remember their histories, but from the signs and symptoms of their insanity, and the circumstances of their lives, I was led to believe that their insanity was caused by the use of Indian hemp. The circumstances to which I refer were their residence in "mattams" and their having about them the necessary equipment for smoking ganja. These circumstances however, I do not regard as material, the principal reason for my conclusion being the signs and symptoms exhibited by them. The signs were dilatation of the pupils, the peculiar breath characteristic of ganja smoking, hallucinations and delusions and illusions, sometimes a peculiar drowsy condition, partial unconsciousness of surroundings, loss of memory, sometimes complete and sometimes partial stammering, incoherence of speech arising from partial or complete

loss of power over the muscles of articulation. I think dilatation of the pupils and the ganja breath are the typical symptoms. I should also put down religious hallucinations and grandiose ideas of self as being typical symptoms. These symptoms may be common to insanity arising from other causes. They are typical when taken with the ganja breath, and in association all together they are diagnostic. In the earlier part of my answer, in which I say that permanent mental aberration invariably results, I meant by mental aberration something short of insanity. In the latter part of my answer I state that insanity, *i.e.*, complete insanity, is generally temporary. I cannot recall any details to substantiate these opinions. They both, as relating to insanity and other diseases, are an undefined impression derived from my general practice.

By undermining 'morality' I mean that moral notions are degraded, but not that sensuality is induced.

47. In my opinion the habit is not inborn, and the children are only affected by way of example.

59. I think ganja is more injurious than opium. I have not seen a man smoking dhatura, but I have seen a case of a man suffering from alleged dhatura-smoking.

65. Reduction is advisable to prevent people taking to more deleterious drugs. The prices of the drugs have been raised in the last few years. If any change is made, it should be in the direction of reduction.

105. Evidence of DR. ARTHUR WELLS, Medical Officer, Chicacole, Ganjam District.

1. In connection with my profession I have come in contact with persons who use preparations of hemp drugs, and with those who are in the habit of preparing them.

2. Yes. (1) Bhang, (2) charas, (3) ganja.

3. Am not aware of any district where it grows spontaneously.

4. Hemp or ganja plant.

5 and 6. Have no knowledge.

7. (a) Yes.

(b) No.

(c) and (d) Yes.

Cultivated in back-yards of houses and in fields in some towns and villages that I have visited.

8. Am not aware.

9. Have no knowledge.

10. No. Persons of all classes, as far as I am aware, cultivate hemp for narcotic purposes.

11. Am not aware.

12. Have no knowledge.

13. Am not aware.

14. (a) Yes.

(b) No.

(c) Yes.

In towns and villages where is a demand for these preparations.

15. Bhang is used for drinking and eating; charas and ganja for smoking.

16. (a) Yes.

(b) and (c) I believe so.

17. By all classes, as far as I am aware of.

18. Bhang and ganja are said to deteriorate by keeping, but not charas. Charas might lose its effect after a long time. All these preparations are said to deteriorate by becoming attacked by insects. If kept in air-tight or stoppered bottles there is little chance of deterioration.

19. Ganja and charas are used by some habitual consumers, even for eating and drinking, by admixture with other ingredients.

20 and 21. Have no knowledge.

22. Charas is imported from the North of India, and used.

23. It is reported that bhang is often used by some classes of people for smoking.

24. Have no knowledge.

25. It is reported that the use of ganja and bhang are on the increase.

26 and 27. Have no knowledge.

28. No average can be arrived at.

29. (a) Milk and sugar are ordinarily used; (b) dhatura, mace, nutmeg, etc., are exceptionally used. Milk and sugar are used to make the preparation pleasant to eat or drink; dhatura, mace and nutmeg, etc., to increase the intoxicating properties of the drug.

A preparation is called bhang massala and is composed of ganja, coriander, carraway, nutmeg, mace, poppy seeds, almonds, rose petals, milk and sugar.

30. Not known. The use of these drugs is not confined to the male sex alone. Females and even children are known to consume some preparations, such as halwa, etc. As a rule, adults after middle age become habitually used to these drugs.

31. The habit of consuming any of these drugs is easily formed. It is difficult to break off. There is every tendency for the moderate user to develop into an excessive user.

32. Among the Rajputs and certain other classes, there appears to be either a social or religious custom of using a liquid preparation with milk and sugar or the halwa during the Holi festival. It is supposed to be essential to use this drug on such occasions. Some use it temperately and others excessively. The use of this drug on these occasions often leads to the formation of a habit.

33 and 34. Have no knowledge.

35. It would not be feasible to prohibit the use of any or all of these drugs. The drug will surely be consumed illicitly. There is no doubt that the prohibition would cause serious discontent among the consumers, but it is doubtful if such discontent would amount to a political danger. It is certain that the prohibition will lead to recourse to the use of other narcotic drugs, and even to alcoholic stimulants.

36. Have no knowledge.

37. The effects of charas-smoking is stated to be more powerful than the effects of ganja-smoking.

38 and 39. Have no knowledge.

40. A preparation of the hemp plant, called halwa, is used in the treatment of dysentery, chronic cough, colic, etc., by native doctors. These drugs are also used in the treatment of cattle disease.

41. It allays hunger, gives staying-power under severe exertion and in alleviating fatigue. Supposed to be preventive of disease in malarious and unhealthy tracts. It is generally used in these instances by the lower classes and by moderate habitual users.

42. Cannot definitely give an opinion.

43. Yes.

44. Exhilarating. Refreshing. Produces intoxication, allays hunger, often creates appetite, effect lasts for some hours, after-effects are not marked. Yes, produces longing.

45. (a) Yes.

(b) Not definitely known.

(c) Cannot definitely state.

(d) No ; but relieves any of these diseases.

(e) Yes.

(f) Yes, it deadens the intellect and produces insanity. The insanity is generally of a temporary nature and would be re-induced by use of the drug after liberation from restraint. There are no typical symptoms. Not as a rule.

(g) I do not think that this question has been sufficiently considered in explaining this connection. Insanity may often tend to indulgence in the use of hempdrugs in a person who is deficient in self-control through weakened intellect.

46. The habitual excessive use of any of these drugs would tend to insanity.

47. It appears to be hereditary. It is reported that the children of the moderate consumer suffer from weak intellect.

48. The same can be said of the habitual excessive use.

49. (a) The moderate use of this drug is practised as an aphrodisiac.

(c) Not known.

(d) Not known.

50. The same can be said of the habitual excessive use of this drug.

51. Yes. Have no knowledge.

52. Same as reply to query 51.

53 and 54. Have no knowledge.

55. I believe so. Yes.

56 and 57. Have no knowledge.

58. No, I am not acquainted

59 to 63. Have no knowledge.

65. Have no knowledge.

68. Yes. If these houses or shops are closed, private clubs would be formed and the drug would even be used in private houses.

69 and 70. Have no knowledge.

Oral evidence.

1. My diploma is that of Civil Apothecary. I entered the service in 1884, and have always been in the Civil Department. I have never had any special training or experience in lunacy. I was born in North Arcot, and am serving in Chincacole.

45. My statement that insanity is produced refers to the excessive use of the drugs.

46. When the drug is used in excess it produces insanity in a very short time. The insanity is of a temporary character and generally lasts some months. This opinion is based on cases which I have had to observe in my capacity as Civil Medical Officer. I have also had to treat three or four patients suffering from temporary insanity. In the jail also I have found prisoners who have been addicted to ganja to show symptoms of insanity of a mild type in consequence of their having been suddenly deprived of the drug. These symptoms do not amount to insanity.

With the cases sent to me for observation, a report is always furnished which, if the insane is a ganja smoker, generally mentions the fact. Relatives sometimes give me the information ; and sometimes the insanes pray for ganja, refusing to eat until they get it. Sometimes the lunatic tells me of the ganja habit on being questioned. The relatives often come with the insane. I have had four or five cases of insanity of this kind sent to me for observation during my service. I cannot say in how many cases I have derived my information from sources outside the reports. These cases do not remain under observation for more than ten days. I do question the insane while still insane as to the cause of his insanity. I try to get into his confidence, and work round to his liking for alcohol or drugs. To relatives I put questions direct as to the insane's habits. I am not satisfied with the relatives' statement that the insane takes ganja. I seek for corroboration in various ways, both by questioning the man himself and enquiring of my subordinates if the insane asks for ganja. I also enquire about heredity. I enter the cause in Form C, if I am satisfied that I have discovered it. I make the entry and send the form to the Magistrate. If I had proof of the ganja habit and learnt that there was heredity, I should enter "exact cause unknown." I made that entry in one case, in which the insane's father died insane and in which there was a ganja history. That was about six years ago. I

do not remember the man's name. He was sent to the sub-jail at Parlakimidi, where he stayed about a year, and was then transferred to the district jail at Berhampur. As well as I remember, in the case under notice, I made no mention of heredity or the ganja history in any part of Form C. This is one of the four or five cases to which I have referred as cases of insanes addicted to ganja, who have been sent to me for observation. I learnt the effects of the hemp drugs as a student. In practice I have come across cases and referred to books on the subject. I have not discovered any signs to be typical of hemp drug insanity. Physical signs are emaciation, impaired memory, peculiar expression. The men in jail to whom I have referred had these signs. I have been an inspecting officer of sub-jails. I diagnose a case of hemp drug insanity on the information of the relatives and the admission of the insane himself. I have been in the habit of trying to find out the amount of the drug used when enquiring for causes of insanity. Any thing over quarter anna worth of ganja as a daily allowance I should look upon as excessive use. In my answer No. 28 I was unable to give any quantities for moderate and excessive use; but, nevertheless, I have given attention to the point before this moment. I would not call half a dozen pipes a day excessive use. The number of pipes a day is generally the form in which answers are given to me when I enquire about the degree of an insane's habit.

The cases which came under my treatment were

not, as well as I remember, under my observation for more than three or four days. The complaint in these cases was generally of loss of memory, and after enquiring the history of the patients and examining them, I put them down as insanity. In some of the cases I had known the patients before they were brought to me. I remember the details of one of the cases showing most clearly that insanity was solely due to hemp drugs. A man, who was suffering from venereal disease and some chest complications was advised by a native practitioner to take hemp. He accordingly took majum for a week or ten days. The relatives noticed that he was becoming quarrelsome, sleepless and abusive, and called me in to treat him. The case occurred about three years ago. I ordered the patient to discontinue taking majum, after exhibiting bromide for three days the above symptoms disappeared, as I afterwards learnt, in about a week. The man was only under my treatment for about three days. He was insane when I saw him. He was an intelligent Brahman of 26 years of age. He was suffering from painful syphilitic nodes. Native practitioners prescribe opium also in such cases. This man had not been taking opium. I don't remember how much majum he had been taking. His pupils were dilated. This sign is not noticed in all cases of hemp drugs. I did not notice high temperature. I am not prepared to say it was not a case of transient mania. I remember that the native practitioner advised the patient to use majum; but, as far as I know, he gave him nothing.

106. *Evidence of K. JAGANNADHAM NAIDU,* Medical Officer, Parlakimedi, Ganjam District.*

1. I consulted several habitual consumers residing at Parlakimedi. For a greater part of my information I am indebted to Sri Sri Padmanabha Narayan Deo, second prince of Parlakimedi, who is highly interested in this question.

2. Yes. Bhang is locally known as patti, and ganja as kalli. It is the hemp-water (the liquid preparation from ganja referred to elsewhere) that is locally called bhang.

3. The district of Ganjam. But it is not abundant here.

4. Trisuli, hijaya, basava-patri, etc.

6. The growth is ordinarily scattered.

7. The hemp-plant is cultivated in this town for production of ganja and for use as bhang. There is a village named Hansa, within 10 miles from Parlakimedi, which was once noted for the production of the best ganja.

The decrease or increase in the area under cultivation greatly varies with the decrease or increase in the number of cultivators and the freedom of cultivation. Hitherto people all over the taluka used freely to cultivate the hemp plant, but now cultivation has been confined to certain licensed vendors and consumers. Hence there has been a considerable decrease in the area under cultivation.

9. Method of cultivation:—A piece of ground is selected. It is well tilled and manured. Then the seeds are sown; and the ground is kept being watered till the seeds vegetate.

When the plants are of a cubit's height, the male ones are singled out and extirpated, and the

female saplings are transplanted in twos or threes. A few days after their transplantation, the tender tops are carefully detached. When the branches are well developed, the plant is subjected to occasional shaking and twisting. Special care is taken to protect the plant against ants and spiders.

When the plant is of a yard's height, an opening is made in the trunk and a bit of opium is infused. Thereupon a palmyra leaf is tied round the open part and is covered over with cow-dung. In order to prevent the plant from flowering, a piece of tile is sometimes thrust into the trunk.

When the flower-tops are well formed, and the seeds almost ripe, the earth at the root of the plant is loosened; and sheep-dung, mixed with ashes, is strewn round the plant. Some fifteen days after this operation, the bottom of the plant is pared off with a knife, so that in course of a few days it gets withered.

When it assumes a yellowish colour, it is uprooted and taken home.

10. It is the licensed vendors and habitual consumers that cultivate hemp. They are generally men of every denomination.

11. No trial has been made yet in this taluka.

12 and 13. I do not know.

14. Only ganja and bhang are prepared.

15. Preparation of ganja and patti from the cultivated hemp:—When the plant assumes a yellowish colour, it is taken root and branch, and

* Summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

hung to a beam with the bottom above under shade. It is kept thus for about four days. It is then exposed in the sun at day-time and to cold at nights for a period of three days. Then the branches are removed off the trunk, placed one over the other, trodden under foot and rolled into small bundles. These bundles are placed on a bed of straw with wooden planks over them. Then heavy weights or stones are put upon the planks, which keep the bundles pressed down. They are thus kept for about three days. Afterwards the bundles are taken and separated and exposed in open air. After two minutes or so, they are trodden under foot in order to get rid of the dried leaves. When all the leaves are removed, they are exposed to cold in the night. Early in the next morning they are taken and spread again upon straw and pressed down with planks. They are kept in this state one full day. The next morning, the planks are removed and the twigs with flower-tops are separated and subjected to gentle shaking, in order to rid off the leaves, if any. Then they are rolled up into bundles, or the agglutinated tops are detached and preserved in earthen vessels. This is how ganja is prepared for smoking.

The dried leaves that are thrown down after so many processes of elimination above referred to are used as bhang or patti. After carefully removing the stalks, the dried leaves are boiled in water for some time; and the boiled leaves are well squeezed with the hands in order to purge them of all filth and dirt, and then dried in the sun. They are next boiled either in milk or cocoanut-water. The quantity of milk or cocoanut-water must be proportionate to the quantity of leaves boiled, so that the milk or the cocoanut-water might be entirely absorbed by the leaves. They are again kept in the hot sun for about three or four days. After they are well dried, they are preserved in earthen vessels for use. This is how bhang or patti is prepared from cultivated hemp-plant for the purpose of drinking.

16. Bhang is prepared by some in their houses and by others in temples. Yes, it can be prepared from the hemp-plant, wherever grown. As regards the preparation of ganja from the wild plant, no trial has been made as yet in this taluka.

17. By the licensed vendors and habitual consumers. These are generally men of every denomination.

18. Ganja and patti do deteriorate by keeping. But they do not quite lose their effect in time. Ganja keeps good for about two years and patti for six months at the most. The causes of deterioration are:—(1) Ganja becomes quite dry as dust, and loses its resinous matter. (2) Patti gets decomposed.

19. Ganja is not only used for smoking, but also in the preparation of hemp-water and certain other drugs, such as kamaswaramu, majumu, halwa, phanki and ganja ointment.

Ganja water:—Ganja is mixed with pepper, and powdered to dust in a stone mortar. Then water is poured in, and the liquid mixture is filtered. Before it is ready for use, the liquid is kept, being poured from one vessel into another for ten minutes, and then drunk.

Kamaswaramu:—Ganja is wrapped in a piece of white cloth and boiled in cow-milk. After an hour or so, the ganja is thrown out, and the boiled milk is churned into butter or ghi, which with certain other ingredients, gives you the abovenamed preparation.

Majumu:—Ganja is powdered, and the powder is fried in ghi. Afterwards it is mixed with sugar and jaggery and other ingredients, and majum is formed.

Phanki:—Seeds and stalks are removed from ganja. With a few drops of water it is well squeezed until it becomes a consistent clot, which is swallowed at a gulp.

Ganja ointment:—Ganja is boiled in Ippa oil, and the oil is painted over the legs of the patient in cramps.

These are prevalent in this taluka.

20. There is no charas here. Generally lower classes of people and bairagis smoke ganja. Proportion not known.

21. Only flat ganja is found in this taluka.

22. No charas prepared here.

23. Patti or bhang is scarcely used for smoking. If used at all, it is by those that are too poor to purchase ganja.

24. Men of every denomination eat and drink bhang. About 20 per cent. of the population of Parlakimedi town, including those that consume it on special occasions.

25. Use of bhang seems to be on the increase, on account of its supposed exhilarating and refreshing effects. Smoking of ganja is supposed to prevent malarial fever, which exists to a large extent in this taluka.

26. Do not know.

27. Smoking ganja is prevalent only in the lower classes. Bhang is consumed more by well-to-do people.

28. (a) About two tolas per diem; cost half anna.

(b) About ten to twelve tolas; cost about three annas.

29. The ingredient that is ordinarily mixed with ganja for smoking is tobacco; and the ingredients exceptionally mixed are sandal-wood powder, musk, poison, opium, attar, *Hibiscus tortuosus* and *Cyperus rotundus*. The ingredient ordinarily mixed with ganja or patti for drinking is pepper, and those exceptionally used are cloves, cardamoms, nutmeg, mace, cassia leaves, poppy, cinnamon and various other spices.

Dhatura is used both in smoking and drinking. Poison, dhatura, opium, and nutmeg are used to give greater intoxication. Other articles are used only to give flavour.

30. More in solitude than in company. Smoking confined only to the male sex. Prostitutes eat and drink preparations of bhang. Children do not use them.

31. The habit is easily formed. When once formed, it is very difficult to break it off all on a sudden. But it can be given up gradually. There is a tendency for the moderate habit to develop into the excessive.

32. On Mesha Sankramanam day, it is the custom here to drink hemp water. It is believed that Anjanayya, with whom ganja is a favourite object, was born in this day. This custom does not seem to receive any sanction from the Sastras, but has been in existence from time beyond living memory. It is not absolutely necessary to drink hemp water on this day. The custom is sometimes more honoured in the breach than in the observance. The drug taken on this particular day is generally temperate, and is not likely to lead to the formation of the habit.

33. The consumption of any of these drugs is regarded with contempt. I cannot positively say that there is any organised public opinion. Yes, the use of any form of the narcotic is generally in disrepute. The sentiment is attributed to the fact that the consumption of any of these drugs causes derangement of the brain. No custom of worshipping the plant.

34. To forego the consumption of the drug will be a serious privation, especially to the habitual consumers. When the habit is formed and becomes second nature, though compliance does not give pleasure, resistance creates a want or longing. "The very fact that they are customary has as its further result the attachment or clinging of the mind to them, so that their removal occasions a painful sense of strangeness and craving." This is the law of habit.

35. No; it would not be feasible. Yes, the drug will be consumed illicitly. Prohibition is sure to cause serious discontent among the consumers, though it may not amount to a political danger. In case of prohibition, recourse will be had to alcoholic stimulants and other drugs.

36. Certain cases have come within the range of my observation, in which alcohol has been substituted for ganja.

37. Charas is not smoked here.

38. Only flat ganja is prepared here.

39. The popular belief is that eating is more injurious than drinking, and smoking is more deleterious than either. I cannot assign any specific reason. But this much I can say: in eating or drinking, patti or bhang is generally used, whereas in smoking only ganja is used, and ganja is more inebriating than patti or bhang.

40. Ganja is used by certain native doctors on account of its medicinal qualities. They think that it increases virile powers and checks dysentery.

41. (a) to (e) No.

Those living in malarial places smoke ganja under the belief that it prevents malarial fever. In my opinion it does not prevent.

42. Very limited use of bhang is harmless.

43. They cause no manner of offence to their neighbours.

44. The immediate effects are :—It is quite refreshing. It produces intoxication. It does allay hunger.

I have seen sanyasis entirely dispensing with food for days by smoking ganja. But as soon as intoxication subsides, what is called exhaustion comes on and all the pangs of hunger that have been in abeyance are felt. I have also seen that their bowels are not moved unless and until they smoke ganja. These effects last so long as intoxication endures. The effect lasts for an hour or two.

45. (b) to (f) No.

46. Excessive smoking does affect the constitution and produce asthma. But excessive drinking and eating do not produce any of these effects generally, that is, chest symptoms. Excessive smoking and eating do deaden the intellect and produce insanity. A few cases of insanity, sometimes of a violent nature, caused by excessive smoking and eating, have come within the range of my observation.

47. I do not think.

48. I do not know.

49. Yes. Yes, so used by prostitutes. Long-continued use sometimes produces impotence.

50. Excessive use produces loss of senses.

51. No.

52. Persons intending to commit suicide or homicide sometimes have recourse to bhang, so that they may be stirred up to commit the offences.

53. Likely. No.

54. Yes, sometimes.

55. (a) Sometimes.

(b) Yes.

56. I do not know.

57. No charas here.

58. No.

61. No.

68. There are licensed shops.

69. No, the wishes of the people are not consulted. Local public opinion should be considered.

70. No.

107. Evidence of Assistant Surgeon SALDANHA, Salem.

1. My information has been obtained from local vendors of the hemp drug and from several veteran consumers of the same in some form or other by careful interrogation, and also from some non-habitual consumers who have had opportunities of watching its effects, the uses it is put to, etc.

2. The uncultivated plant is not known in this district, and it is only by special cultivation that the plant is raised, which is of two varieties, male and female. The male plant is said to be useless, and is rooted out and thrown away as soon as the sex is discovered, so as not to hamper the growth of the female. A small minority of my informers told me that the plant in quest is the male and not the female, but this is probably a mistake, although a couple of these informers have had some experience in the cultivation of the plant on a small scale. Although three narcotic articles, namely, ganja, bhang and charas, are

generally supposed to be obtained naturally from hemp, yet in reality it is only the first and the last, inasmuch as the bhang is purely an artificial preparation from ganja, into which several other ingredients enter besides, namely, pepper, garlic, milk, poppy seeds, cocoanut water, sugar or sugar-candy, and plantain. Of course it is not necessary that all these ingredients must be present, but as a matter of fact most of these are.

Of the two natural products, only the ganja is obtainable in the local bazars, and that of the flat variety; charas, the resinous matter, is said to be the costliest and is wholly exported. The definition of ganja holds good for this district.

3. It is denied that hemp ever grows spontaneously in this district.

4. Only known as ganja plant.

7. Yes; and especially for the production of ganja. Charas is hardly the object of cultiva-

tion, nor the fibre. Said to be cultivated to a considerable extent on the hilly tracts of the district, especially the Javadi hills and Patchai Malai by the Malayalis. Also raised to a small extent, chiefly for private use, down the plains, in gardens. Plant is said to thrive better on elevated tracts.

8. If anything, the cultivation would appear to be increasing. No particular reason is given.

9. I could not obtain reliable information on this point.

10. The hill people that cultivate hemp on a large scale are almost exclusively the Malayalis; but this does not form their only occupation; in fact, there is no special class of hemp cultivators.

11. No; not in this district, as far as I could gather.

13. Cultivation not restricted in this district. No special condition of climate, etc., seems necessary for the cultivation; but elevation above sea level is said to be very favourable for the growth.

14. (a) Mostly ganja, in which form only it is sold in the bazars, excluding, of course, other preparations of it by hakims, etc., for general sale. Prepared mostly on the hill tracts mentioned before, and to a very small extent by private individuals on the plains.

(b) Charas gathered to a small extent also on the hills and exported.

(c) Bhang not prepared by any body to any extent for sale; but those of the consumers who prefer this particular preparation have to make it themselves, and this number is infinitesimal, I am told.

15. (A) Preparation for smoking is made from ganja, mixed with minced tobacco, in different proportions, according to the fancy of the smoker. It must be noted that ganja is never used by itself for smoking, but invariably with admixture of tobacco—a fact perhaps not universally known. Charas is also used for smoking but not in this district at all.

(B) For eating, a certain quantity of ganja is soaked in water and washed, and is then ground down fine together with sugar or sugarcandy, poppy seeds, almonds, cocoanut milk, or cow's milk, etc., and made into little balls and swallowed, the quantity, of course, varying with the intensity of the effect desired to be produced.

(C) The preparation for drinking is really the bhang, and is the same as above, only made liquid by extra addition of water or milk. The above described eating preparation is also indiscriminately called bhang.

16. Only prepared by the consumer himself. But the number that use it is very small. Prepared only from ganja of cultivated plant. I am not able to tell whether ganja and charas can be prepared from the wild plant.

17. By lower classes of Hindus and Muhammadans, about equal proportion in this district.

18. Ganja does not keep good after five or six months, being very subject to attacks of insects after this period, and also quite loses its effect in time. If saved from inroads of insects and worms, ganja will keep good for a year at the outside. No special measure seems to be taken to prevent deterioration, except closing the mouths of the containing vessels securely. Some vendors are said to put some camphor or pepper seeds into the pots to keep vermin out. Bhang is never kept for any length of time, but always used then

and there, or if it is the eating bhang, only a quantity sufficient for a few days is prepared by the petty vendors. Nothing is known about the keeping qualities of charas.

19. Ganja is almost exclusively used for smoking. Only a small minority use it to prepare bhang.

20. Mostly used by low classes of Hindus and Muhammadans; of the latter, notably the fakirs. Charas is not at all used in this district. It is difficult to ascertain what proportion of people smoke ganja in the district; but I am informed there may be about two or three thousand in the town of Salem. Smoking is carried on in private houses, and also in so called ganja dens, of which there are two in Gogai, two in Salem, one in Sevapett, and one in Ammapett.

21. Only the flat kind of ganja is used here.

23. No; not in Salem.

24. Bhang is said to be used by an insignificant number—say 1 in 200 at most.

25. Use of ganja is said to be on the increase. The reason assigned is that the poor, coming to know that they can buy a soother much more cheaply in the shape of ganja than they can liquor, fall gradually to the former. Besides, they say ganja effects are more lasting and less pernicious than those of liquor.

26. Most are of class (a); some fall into class (c); very few are of classes (b) and (d). This is with reference only to ganja-smokers. The bhang-eaters and drinkers are so small that I have excluded them.

27. So far as I could gather, no particular habit of life or circumstance seems to lead to the practice. Some seem to learn from others, just as in the case of the vice of tobacco smoking or drinking; some seem to have recourse to it as a cheap way of intoxicating themselves, as mentioned in paragraph 25; and a few contract the habit from having first used the ganja as a medicinal agent for asthma, for instance.

28. (a) 4 or 5 pies per diem on an average.

29. (a) Ganja-smokers invariably mix tobacco with it, to get, it would appear, the full effect of the drug, and also to make the smoke more palatable and less irritating, as otherwise it tastes bitter and nauseates them. Again, it is only by the admixture of things like pepper, garlic, milk, sugar, etc., to the ganja, that the bhang is prepared. I am told that dhatura is never mixed.

30. Ganja-smoking seems to be practised mostly in company; but bhang eating in solitude, if at all. Confined to the male sex, and, as a rule, above middle period of life: At any rate the practice appears by no means common among young men. Children don't consume the drug in any shape usually; but there seems to be a practice among Muhammadans, though not, perhaps, universal, of drugging the male children with a small quantity of bhang shortly before circumcision, with the object of rendering the operation painless.

31. Not very easily, as the effects of an initiative attempt are said to be anything but agreeable, lasting for several hours; especially is this the case with bhang. Habit once formed is difficult to break off. Information is conflicting on this point, some saying 'yes' and others 'no.' I am inclined to think that in this respect it is not worse than the vice of liquor-drinking, moderation or excess depending upon self-control of the consumer.

33. The public opinion on the habit of ganja-smoking appears to be that it is degrading, and this seems to be the reason why a ganja smoker always has a reluctance to be known as addicted to the habit, and is very unwilling to confess it. Among Muhammadans, the Koran prohibits strictly the use of any intoxicating drug whatever. But among the low Hindus, there seems to be no such religious prohibition. The use of the narcotic in question is generally in disrepute, because it makes the user callous to his surroundings, indifferent to the welfare of his kith and kin, and even to his personal well-being.

Certain sects of the people in Northern India are said to make, on certain occasions, bhang the object of worship. But no such thing exists here.

34. I am told it would be a serious privation to forego the drug accustomed to, as it would produce certainly some evil consequences, such as diarrhoea, flatulence, complete loss of appetite, utter disinclination to do any work, and even madness.

36. No; as far as I am able to make out. My informers emphatically tell me that the effects of alcohol and of hemp are almost antagonistic, and that one addicted to the latter will hardly ever think of taking to alcohol, even if he be quite deprived of the drug, the antipathy to alcohol produced by the habit being so great.

37. There is no charas-smoking here at all.

38. Only the flat ganja is used.

39. Ganja-smoking is believed to be more injurious than bhang-eating, unless, indeed, the latter is carried to great excess, coupled with inadequate living. The reason attributed is that the former, habitually used, dissipates the appetite and dries up the constitution, and is also apt to produce a chronic cough. It also slowly but surely destroys the virile power and weakens eye-sight. On the other hand, the ingredients mixed with the ganja to make bhang counteract the ill-effects of the drug, and thus render the latter preparation less injurious. It also sharpens appetite, and therefore does good to the consumer, as long as he is able to obtain sufficient food in satisfaction to the increased demand.

40. None of the drugs used by itself medicinally; but native physicians are said to prepare a kind of 'halva,' of which ganja forms one of many ingredients, and use it medicinally, one action attributed to it being that of aphrodisiac.

Ganja is used for cattle disease, mixed with other things.

41. Even moderate habitual ganja-smoking is (a) said to undermine digestive powers, although it seems to somewhat promote them at the commencement, and also suppresses desire for food, so that an habitual, after smoking, is not particular about food, though the moment before he might have felt very hungry; (b) hardly; (c) is reputed to have the power of preventing disease in malarious and other unhealthy tracts; so that habituais can travel from place to place of different climatic and other conditions with impunity from such trivial complaints as are incidental to such a fugitive life. Habitual use of hemp in any shape is also said to render the consumer almost proof against snake-bites. Occasional moderate use of hemp in any form would also seem to act as aphrodisiac. Bhang, besides having all the above properties in a more marked degree, is also said to possess the beneficial effects pointed out in (b), be the drug used habitually moderately or occasionally moderately. Moreover, bhang

does not so easily destroy digestive powers or the appetite. This is perhaps due to the dilution it undergoes in the preparation. The hill people are said to use ganja for purposes indicated in (c).

43. As a rule inoffensive; but it occasionally happens that a novice is too much excited by ganja smoke, and then may prove obnoxious to neighbours.

44. (a) The immediate effect of ganja-smoking or bhang-eating is to produce an exhilarating and satisfactory feeling, and to produce forgetfulness for the time being of mental trouble. (b) Said to be refreshing. (c) Yes; very slight in ganja, but more in bhang. (d) Yes; ganja does, but bhang increases hunger and the desire to eat, which must be satisfied without stint, else evil result follows, markedly emaciation and nervousness. (e) Not ganja, but bhang does. (f) That of ganja lasts four or five hours, but that of bhang double the time, or even more. (g) None, it would appear. (h) Yes; very decidedly.

45. Consumers say no noxious effects are produced under any of the three heads so long as sufficient food is supplied, but that physical and mental deterioration is brought about if supply of food is inadequate; but no moral ill-effect. Others contradict and say that even the moderate use of any of the drugs produces eventually emaciation, complete loss of virile power, a continuous moroseness and apathy to surroundings, chronic cough, mental deterioration, sometimes even amounting to insanity and annihilation of love for kith and kin, and also considerable diminution of nervous energy, etc. But it is pointed out saliently that the habit never leads to intemperance, but on the other hand produces a kind of antipathy to liquor. Said hardly to impair the moral sense, or induce habits of immorality.

47. No evidence at all of the ganja habit being hereditary, nor does it seem to affect the children of moderate consumers.

49. (a) No; although the effect on a beginner is said to excite sexual desire. On the other hand, the habitual use is said to decidedly quench the desire, and is for this purpose used by fakirs.

(b) No.

(c) Not known.

(d) Decidedly yes; although a very few deny this.

51. (a) No.

(b) Hardly any connection.

53. In some few cases excessive indulgence is said to induce so much excitement as to lead to acts of violence on the slightest provocation, such as severe assault, regardless of consequences. But ordinarily the effect of such indulgence seems to be to completely incapacitate the individual, either by intoxicating or by inducing an extreme apathetic condition, so that no attempt whatever is made even to resent an aggression.

No such case is known to me.

54. Not at all usually.

55. (a) Very seldom indeed.

(b) It would appear so.

56. As observed before, ganja is always smoked with an admixture of tobacco, which would seem to bring the effect of the drug out to full advantage, and also to mitigate its ill-effects, notably the nasty bitter taste of the drug and the tendency to produce dryness of chest. The ingredients entering into bhang would seem to remove the ill-effects of the drug to a large extent, at the same

time considerably enhancing its efficacy as an appetizer, narcotic, aphrodisiac, and general excitant of spirits. In this district dhatura is never known to be mixed with ganja or bhang before consumption.

57. Only an inveterate habitual smoker here

and there is said to eat sometimes the ganja pure, after washing and grinding it fine so as to obtain the full intoxicating effect, and the effect is said to be the production of profound intoxication, lasting for two, three or four days, during which period hardly any food is taken.

108. *Evidence of Hospital Assistant T. RANGANAYA KULU NAIDOO, Rajahmundry, Godavari District.*

3. The wild hemp plant grows spontaneously in the Nellore District, and grows abundantly in the village of Kudithipallam of that district. In this district the wild hemp is not grown.

4. Checlavathy, Balucharan, hill ganja, and Thaggupadu ganja are the different names used here for the Indian hemp plant according to its quality and the place in which it is cultivated. All these names refer to the female plant—one with less seeds, another has more seeds.

5. Cold climate, black soil, moderate rains, and ordinary elevated soil favour its cultivation.

6. Scattered.

7. Almost in every district, but mostly in the Thaggupadu in the Kistna district, which is superior in quality to this district.

In Godavery district—

Vadapally, 1 acre of land cultivated.

Thaneeku taluka, 2 acres of land cultivated.

Rajahmundry, 1½ acres of land cultivated.

Hill Tracts, about 2 acres of scattered pieces of land.

For ganja and bhang.

8. It is on the increase, because it is fetching high price on account of the excise system.

9. The seeds are sown in a small piece of dry cultivated land previously prepared for it towards the end of the rainy weather, and when the plants are sufficiently grown they are transplanted in a separate ground after ploughing and manured.

10. Same as other agricultural cultivators. There is no special class for this cultivation.

11 and 12. No.

13. Thaggupadu in the Kistna district, because it is a fertile soil for the cultivation of ganja. In this district the cultivation is moderate on account of the bad soil.

14. Ganja and bhang:—Nellore, Kistna, and Vizagapatam to a large extent. Other districts in the Northern Circars moderate.

15. Wild plant is not cultivated in this district. The cultivated full grown hemp plant is cut and exposed day and night for a week till it is completely dried. Then the branches are broken and tied in bundles. Over these bundles a heavy weight is placed for a week to make the flowering tops flat, and then these flowering tops collected and stored up for use. The mode of preparing it is the same as for smoking, eating and drinking.

16. Bhang is generally prepared by the people in their houses. It cannot be prepared from the hemp plant wherever grown. Ganja or charas cannot be prepared from the wild plant wherever it is grown.

17. There is no particular classes of people who make the preparation of the hemp drug.

18. Yes; it loses its effect entirely in course of time. It keeps it for about a year with ordinary care. Time and exposure are the causes of its deterioration. Any special care will not check its deterioration.

19. Ganja is used in this district for smoking, eating and drinking. Charas is not used in this district, as it is not imported. Ganja also is used in the form of halwa, pannia and bhang-dally, according to their whims and pleasure. Mostly prevalent in towns and slightly in villages.

20. Bairagis, ascetics, and the poor of labouring classes smoking ganja largely in mattams and choultries. Hindus, Muhammadans, and Rajputs smoke moderately and privately. Ganja is used in almost every town, and it is not confined to one particular locality. About 5 per cent.

21. Round ganja is used here for smoking, because the other kinds are not procurable in this district.

22. Charas is never used here, as it is not imported to this district.

23. Bhang is never used for smoking in this district.

24. There is no particular class who eat bhang. Even those that eat are very rare. Rajputs, Marvadis, and poor of all classes drink bhang moderately: about 5 per cent.; Muhammadans drink bhang largely at Ellore: 25 per cent.; Hindus moderately: 10 per cent.

25. The use of ganja is on the increase, because the hill ganja is imported stealthily in large quantities and sold cheap.

26. (a) 10 per cent.

(b) 2 per cent.

(c) 5 per cent.

(d) 2 per cent.

27. Ascetics from all classes of wandering habits, Muhammadans, Rajputs, and Hindus of military life. A few of lower labouring classes.

28. (a) 3 pies worth per day.

(b) One anna worth per day.

29. (a) Tobacco is mixed ordinarily.

(b) Opium by fakirs to increase the intoxicating effect of the drug.

Aconite in cold weather, when fogs are heavy, and when suffering from fever. Dhatura when suffering from severe cold, bronchitis and asthma by ascetics of excessive consumers on rare occasions.

Bhang massala contains poppies, liquorice, cucumber seeds, cinnamon, cardamons, aniseed, coriander, mace, nutmeg, pepper, ginger, and dried rose buds.

Halwa—Hemp leaves, sugar, poppy, nutmeg, cloves, cardamons, aniseed, mace, almonds, honey, asparagus racemosus, asteracantha longifolia, curculigo orchidioides.

Majum—Powdered avaloo rice, sugar, essence of ginger, hemp leaves, and milk.

30. In solitude less, company extensively. It is mainly confined to the male sex. Children never consume these drugs.

31. Majum and halwa preparations of hemp are easily formed, smoking with little difficulty. It is difficult to break off in old age. In adult age may break off the habit easily. There is a tendency to develop into excessive.

32. Both social and religious. Social—bad society. Religious—ascetics and fakirs of wandering habits. It is regarded as essential with the ascetics for the concentration of thought and of the enduring habit. It is generally excessive, and it is injurious to health by affecting the lungs and general waste of muscles.

33. Public regard the consumption of this as degrading and one of the vices. In regard to the practice, the public opinion is both social and religious. Social—bad society of low morals. Religious—it is believed to tend to concentrate the thought for the purpose of offering prayers. It is generally in disrepute on account of its intoxicating property, and also its deteriorating effects on the health. Never worship the ganja plant.

34. Yes; in ganja and charas smoking, because the privation will lead to suffer from puffiness of belly, indigestion, loss of appetite, cough, accumulation of phlegm in the throat, constipation, and nervous exhaustion. Bhang drinking can be given up without any suffering. Probable number in each class is about 1 per cent.

35. No, in regard to the ganja and charas, and it is consumed illicitly. The prohibition can be enforced, but causes serious discontent among the consumers. There may not be any political danger. The prohibition will lead them to practise alcoholic drinks and no other drugs.

36. No.

37. The effects of charas are stronger and longer than the effects of ganja smoking.

38. The effects of chur lasts about four hours. The effects of flat lasts about three hours. The effects of round lasts about less than two hours.

39. Drinking is less injurious than smoking and eating, because it does not affect the health. Smoking by affecting the lungs and nervous and muscular systems. Eating will lead to gradual development of temporary insanity.

40. Yes, native doctors prescribe for dysentery, chronic diarrhoea, and cholera, mixing with poppies, pepper and sugar. Headaches, tetanus, and menorrhagia. Never prescribed to cattle.

41. Yes.

(a) Yes. It is digestive when taken after meals. Every class 1 per cent.

(b) Yes. Fakirs and ascetics, 1 per mille.

(c) Yes. It is considered as a preventive when travelled in malarious tracts.

(d) As an aphrodisiac men of bad morals, 1 per mille.

I refer this to both moderate habitual and moderate occasional, except (d) when taken occasionally; otherwise it loses the aphrodisiac effect.

42. Moderate use; it is certainly unattended with harm. Keeps up spirit in anything he is engaged, and doesn't impair health, except on generative organs.

42. Yes.

44. The immediate effect on the moderate habitual consumers is that it keeps him merry and steady in his reflections in whatever direction his thoughts may lead to, such as singing, pleasant conversation, etc., not in committing crime or fighting. It is refreshing; produces ordinary intoxication. It does not allay hunger; it does create appetite. The effects may last about an hour and half. The after-effects are weakness and laziness. No longing is felt till his usual hour for taking, unless the habit is excessive.

45. (a) No.

(b) Does not impair the constitution.

(c) to (e) No.

(f) No. The insanes who have no recorded history of ganja do confess sometimes to the use of the drug. This is alluded to excessive consumers.

(g) In alleged connection between insanity and the use of the hemp, the use of the hemp does give relief to the persons suffering from mental anxiety or brain disorders. I don't think that there is any evidence to indicate that insanity or weak intellect will tend to indulge freely in the use of hemp drugs.

I have met with a few cases who suffered from temporary insanity caused by the excessive use of ganja (either by excessive smoking or eating, mostly the latter). Never used indiscriminately without self-control. They may take the drug very frequently, but in moderate quantities.

46. It produces worse results in aggravated form in habitual consumers, used excessively.

47 and 48. No.

49. Yes, moderate use occasionally. Never used by the prostitutes. It is not injurious than the one used as ordinary narcotic. The use of the hemp does tend to produce impotence.

50. If used excessively, produce worse results than above.

51 (a) No.

(b) They become timid after consuming the drug, and never commit any crime.

52 to 54. No.

55. Yes; complete stupefaction can be produced without any admixture.

56. (a) The effects are moderate when the preparation of hemp halwa is taken.

(b) No admixture of any drugs with hemp will modify its effects so as to take it excessively.

Dhatura is mixed when excess intoxicating effect is required, or persons suffering from asthma for personal consumption only; and never given to others mixed with dhatura.

57. The ganja, when used as a drink, does not destroy the health. When it is eaten, it causes mental derangement of the most excitable nature. Charas never used either for drink, smoke, or eating in this district.

58. Capable of improvement.

59. If you want to improve the taxation, raise the rate of taxation on the drug either cultivated or imported. If you want to have the control over the hemp cultivation, limit the cultivation on certain localities only. If you want to improve the social or moral life of the public, stop the cultivation of the hemp altogether.

60. As the cultivation of the hemp is not widespread, it can be controlled by stopping the

cultivation of this plant. No modification is necessary.

61. Not produced in this district.

62. It may be controlled. It is feasible. Raise the tax. Cultivation of the plant shall be limited under license.

63. The present system is satisfactory.

64. Yes; if you stop the importation or exportation of ganja to those parts where it is not cultivated, it will, I think, greatly lessen the number of consumers; if not the number, it will at least lessen the quantity of consumption.

65. The taxation of ganja is reasonable with reference to alcoholic intoxicants. In this district only we have ganja, and the other kinds are not sold, being not procurable; hence I cannot suggest any alteration in the amount of taxation of any of these articles.

66. As there is slight difference in quality between flat and round, the rate of taxation may be slightly reduced to the round kind, as it is little inferior. The broken is very inferior in quality than the other two. The rate of taxation on this preparation may be very much less. Ganja, grown in Thaggupadu in the Kistna district, is superior in quality than the one cultivated in Godavery, the tax of which may be slightly raised.

67. No.

68. Yes, there are licensed shops in the town. These should not be within the limits of the town. The public generally view with aversion whenever they see the shops selling intoxicating drugs. These should be out of the limits of the town so as to give less chance of coming in contact with such shops by the rising young generation.

69. No, wishes of the people not consulted. No measures were taken for this purpose. Local public opinion must be consulted.

70. No.

Oral evidence.

3. I learnt in my enquiries that the plant grew spontaneously at Kudithipallam. Nellore is not my district. My informants were military pensioners. Some of them were inhabitants of the Nellore district. I made enquiries of bairagis also and the licensed vendor of the hemp drugs, and a sweetmeat-maker. I did not ascertain that the hemp plant grew spontaneously elsewhere than at Kudithipallam.

39. By eating I mean the eating of the leaves and flowering tops of ganja. The drug was not eaten in my presence, but consumers told me that they used to eat it. Smokers of the drug would not eat the drug on the same day that they smoked it, nor *vice versa*. The number of eaters is very small, perhaps only 5 per cent. of the number of smokers. I had previously heard that the drug was eaten, but the information I have given in my paper was collected in my enquiry.

45. Native physicians do prescribe the drug in cases of mental disorder. They come and consult me on the subject, and that is the way in which I come to learn this. The drug is used in the form of halwa or majum. They consult me to get my opinion as to the drug being safe or dangerous. I think the drug does give relief in these cases on account of its soporific quality. I am not aware if the drug is used in asylum practice.

109. Evidence of Hospital Assistant M. IYASWAMY PILLAY, Saint Thomas' Mount, Madras.

1. During my service in the Madras Subordinate Medical Department, extending upwards to a period of nineteen years, I had visited several stations, both in the presidency and in the Central Provinces, where I had the opportunity of observing personally, besides obtaining the information regarding the use of the hemp plant, which is somewhat commonly used in the latter provinces.

2. The various definitions used to the several kinds of the hemp plant are applicable to one and all the districts I had visited, and they are known as bhang, charas, ganja, respectively; but in this district ganja is the only hemp plant that is being used by the people.

3. I have not known any place where the hemp plant grows spontaneously, and it would never grow unless the seeds are planted.

4. None.

5. The hemp plants will grow in soils other than 'black cotton' requiring an ordinary rainfall. Winter season and elevated place will greatly assist the production.

6. They are sown densely at the commencement, and then transplanted here and there.

7. None.

8. Not known.

9. The ground is first tilled and the seeds are sown. When it grows to a height of a foot or so it is transplanted. After a period of six months,

when it is fully grown, it is cut and dried in the sun and shade alternately for a period of seven days, and then it is closely packed and allowed to remain for another week more, and afterwards transferred into the bags.

10. The persons who cultivate hemp plant are of the agricultural classes and nobody else.

12 to 14. Not known.

15. The only variety of hemp plant that is met with in the bazaars of this district is ganja, which comes from up-country and which the people use for smoking, eating and drinking.

16. Though bhang is not prepared in the houses of this district, but I had known several instances, while serving in the Central Provinces, where the people prepared bhang in their houses from both the ganja and bhang plants.

17. Agricultural classes.

18. These drugs can be kept without deterioration for about six months or so, provided they do not come in contact with water or other fluid substances, and if deterioration sets in at all, they do not lose much of their activity. Dampness and keeping for a length of time favour deterioration. To prevent it, it is necessary to expose them in the sun occasionally.

19. The witness only knows about the use of ganja, to which alone I shall confine my remarks. It is not only used for smoking purposes, but also for eating and drinking, irrespective of places.

20. To a population of nearly 3,500 in the station I am serving, there are about 25 persons who are actually habituated to the use of ganja. The proportion then comes at the rate of $\frac{1}{140}$ to 100, which is a very small figure indeed. In the province of Bengal I believe the proportion will be higher, in consequence of the drug being extensively used by all classes, irrespective of places they resort to.

21. Both the varieties are used for smoking, without distinction of any locality.

22. Not known.

23. In the absence of ganja, persons smoke bhang irrespective of any class.

24. Not known. Applicable to the Bengal presidency.

25. Considering the high prices of liquor, the labouring classes, after their return home quite fatigued after a hard day's work, help themselves with a smoke of ganja, hence there must be of necessity an increase of persons in the consumption of these drugs.

26. Taking my station with a population of nearly 3,500 as an example, the following are the figures by the respective consumers :—

(a)	$\frac{1}{140}$	in	100
(b)	$\frac{1}{100}$	in	100
(c)	$\frac{1}{100}$	in	100
(d)	$\frac{1}{100}$	in	100

It will be seen from the above table that the use of these drugs are not much practised in this district; but in a province like Bengal and Bombay, the proportion of consumers to the non-consuming population must be very high in consequence of the extensive cultivation of these drugs in those parts.

27. People of lower classes often resort to this practice more than the higher and middle classes in this part of the district; but in Bengal and Bombay presidencies there are no restrictions of classes, as every class more or less practise it,—especially the bhang variety; and as regards the lower classes who cannot afford to purchase intoxicating drugs at a cheaper rate, it becomes a practice to them to smoke ganja.

28. (a) One pie.

(b) Varying from one pie to one anna.

29. Some people mix tobacco along with ganja for smoking. I have not known instances where dhatura is mixed with any of these drugs. The object of adding other ingredients is to increase the intoxicating power of the drugs.

There is a preparation called bhang massala which is sold in large stations, such as Madras, etc., and the following are the ingredients:—Almond, poppy seeds, cucumber seeds, nutmeg, nutmeg flowers, cloves, cinnamon, cummin seeds, coconut, dried rose flowers, Mahratti mogar, saffron flowers, milk, sugar, salap misri, rumimusthaki, pepper, ginger.

30. Whatever may be the nature of the hemp plant, it is practised generally in company with others; a few others also in solitude. As a rule the male members are predominant; but in a country like Bengal, I had known several instances where both the females and children resort to the practice, more especially of the bhang variety.

31. The habit of consuming is easily formed; but at the same time it can be easily broken off

without much inconvenience if once practised to it. There is a tendency to develop into the excessive from the moderate habit.

32. There is no custom, either social or religious, in regard to the consumption of these drugs; but the sanyasis and bairagis practise very much, simply because to keep their minds in steadiness for their meditations and devotions. Such custom, however, is not considered essential to them. These persons often indulge in excess, thereby acquiring a habit, without considering, however, whether it is injurious or otherwise.

33. Whatever may be the nature of the hemp plant, the consumption of which is regarded by the public as being infamous and degrading, both socially and religiously, such persons are less regarded, and no reputation is attached to them. Sanyasis and bairagis, who generally live apart from other people, as also the mendicants, cultivate ganja plant to a certain extent for their use, and worship the plant just like the others worship the tulsi plant, on important occasions.

It would be impossible to prohibit any of the cultivation of these plants, for they can be raised illicitly for consumption. Discontent may arise to some extent if stoppage is enforced, and I do not think that any danger of political importance will arise by so doing. Such prohibition, however, would not be necessarily followed by recourse to either (a) or (b).

36. I do not think that alcohol is substituted for any of these drugs.

37. I do not know any thing about these drugs.

38. In its properties, the round ganja stands foremost; then follows the flat variety, and the last is chur.

39. Smoking is more injurious than any other mode of consumption. I had known several instances, while serving in a detachment of Madras Infantry in the Central Provinces, where I had observed myself and gathered information about the use of these drugs. My reasons for confirming that smoking is injurious are as follows:—It affects the respiratory organs to such an extent as to produce consumption and other wasting diseases; hence persons addicted to this mode are generally spare built, with great narrowness and deformity of the chest. In persons who are much addicted to this mode, a peculiar feature will be observed in their persons, and any body would take them to be mad in consequence of the drug acting on the nervous system. These symptoms will not be so appreciable in those persons who use otherwise.

40. There are no particular class of native doctors that receive systematic education at a school of medicine in these days, but quacks and others, who, in consequence of these drugs possessing tonic, stimulant, anodyne, and aphrodisiac properties, prescribe ganja invariably in combination with other medicines. I am not aware of their being used in the treatment of cattle diseases.

41. (a) to (d) Yes.

The beneficial effects of the drug from (a) to (d) refer to those who are moderate occasional consumers.

42. It is also quite harmless if persons take in moderate quantities, for these are largely prescribed by natives in the treatment of several diseases.

43. Yes.

44. The persons grow fine with muscular development, and are more active than they used to be. It is also refreshing, and produces intoxication. It does allay hunger for a time; but it nevertheless creates after a time a voracious appetite. The effects last only for a few hours. It has no after-effects, and, if there were to be any at all, there may be slight dizziness and headache. Subsequent gratification is not necessary.

45. It does not produce any of the symptoms mentioned by persons who use in moderate habitual quantity.

46. The excessive use of the drug would be sure to originate such of the diseases mentioned in the question in a severe or in a less type. Insanity is another form of disease which the use of this drug might produce, either temporarily or permanently. The symptoms may be re-induced by its use after liberation from restraint, and in such cases the disease would be in an aggravated form. Some of the people who are thus subjected to insanity confess to their having used the drug. I have known a person in whom there was deficient self-control through weakened intellect brought on by the excessive indulgence of the drug.

47 and 48. No.

49. It is practised as an aphrodisiac; also used as such by the prostitutes. In moderate doses it can be used both as an aphrodisiac and narcotic. Does not produce impotence.

50. Just the reverse of things mentioned in 49 happens when used in excessive quantity.

51. No bad characters among habitual moderate consumers as far I am aware, and crimes do not occur by moderate indulgence.

52. Reverse of things mentioned in 51 happens if used in excess, and leads to commit crimes without distinction.

53. Excessive indulgence of the drugs sometimes incite to actions of an unpleasant character, almost amounting to crimes, more especially of a violent character. I knew a case some years ago in which it led to temporary homicidal frenzy.

54. Not that I am aware of, though I had been serving in four central and district jails in the Madras presidency.

55. Criminals do administer this drug without any addition to stupefy persons, more especially children, to further their objects.

56. The effects of the drugs, if used in moderation or in excess, modified by the admixture of other substances, are one and the same. I have not known instances where dhatura is used for personal consumption or for administration to others.

57. None.

58. I do not know the exact excise administration in this country, and whatever it may be, I think the present system appears to work well.

59. No improvement is necessary.

60. Ganja is not produced in this district.

61. Not produced here.

62. Not grown here.

63. No objections.

64. No.

65. The present taxation is quite reasonable, and does not call for any alterations.

66. Does not require different rates of taxation for different kinds of ganja, either for the Bengal variety or for any produced in the other localities.

67. No.

68. There are no houses or shops in the station where I am; but in most of the large towns in the district there are licensed shops. In some stations where I had served before I have seen some houses to which the consumers of ganja used to frequent to gratify their wishes, and such houses were regarded by the people as most contemptible and degrading.

69. I am not aware of this subject fully; but what I think is that the opinion of the public needs no consultation regarding the opening of a shop in any locality.

70. Not known.

Oral evidence.

1. I have the certificate of Hospital Assistant from the Madras Medical College (1874) I have been in the service since 1874, serving in various parts, both attached to regiments and (since 1883) in civil employ.

39. By "consumption" I mean phthisis. I have seen some cases of people going into consumption from the use of ganja. I did not ascertain in these cases whether a bacillus was absent or present.

46. I say that insanity might be produced, because I have not seen any cases. By "deficient self-control" in this answer I mean that the man could not restrain himself and keep to moderation in the use of the drug.

53. The case of temporary homicidal frenzy referred to occurred ten years ago. The man was a Hindu of the Pillay or shepherd caste, who used to eat the ganja in the raw state—the leaves from the bazar. He did not smoke it. He ground the dried leaves and ate them. He took it to excess. I have seen him eat it. The man lived close to me in Madras. He was an educated man. He was a quarrelsome man, and used to attack his relatives and beat them. He did this often. He was not insane. He quarrelled and used rods or sticks for beating his relatives. No such assault was ever made the subject of police inquiry. He was a violent man. There was a family quarrel between him and his uncle, and it was the uncle and his children this man used to attack. I think that on all of these occasions the man wanted to commit murder. That is why I call it homicidal frenzy. I think it was the hemp drug used to excess that made him violent. He was naturally a quiet man, and all these outbursts were when he was under the influence of the drug. I have seen him so twice. He used to take liquor also, and was several times drunk from the effects of liquor. I think it was the joint use of liquor and the drugs that made him act so. As the questions were restricted to hemp drugs, I said nothing about liquor. He was under the influence of ganja on the two occasions I saw him violent.

110. *Evidence of Hospital Assistant M. V. RAMANUGULU NAIDU, Peddapur, Godavari District.*

1. Being aware that the drugs used by men professing to practise Yogam, I had to make enquiries regarding its quality and vitality.

2. As far as I have known, and from what I have heard, there does not seem to be difference in the shape.

3. I have seen ganja not anywhere grown spontaneously, and it is, as a rule, reared in gardens, specially of Muhammadan community. It is reared in the districts of Madura, Kurnool, and Cuddapah, where there are Muhammadans to a great extent; and I have heard of its being grown in the presidency of Bengal.

4. It is grown in the rainy and dewy seasons. It is specially seen flowering from the latter part of December up to March or April. Red soil is the best field for its growth.

6. Scattered.

7. A cultivation to some extent for (a) and (d).

10. No; they are as other cultivators.

11. It is.

12. I have seen nowhere hemp cultivation specially for ganja in places I have had occasion to go. People used to rear them generally in small quantity in their gardens.

13. No.

14. Ganja to some extent and bhang to a little are made.

15. For drinking, they mix plantains, sugar, milk, and juice of the flowering tops of the ganja. For smoking the simple drug is used, and the people eat for intoxication.

16. (a) Not in houses generally.

(b) Yes.

17. The Rajputs, the Muhammadans, and the Bengalis, and some other lower orders of people in the south.

18. Yes, they deteriorate by keeping. Yes; they lose their effects in one week. If kept airtight, deterioration may be prevented.

19. For smoking.

20. Generally by lower orders, and specially by those who profess to practise Yogam.

23 and 24. By Muhammadans.

27. It is not used by men in high society, except in rare cases. It is practised more by labouring classes.

29. Dhatura is never used.

30. As a rule, mothers give ganja to children as a medicine to cure indigestion. Bhang and ganja are used more in company of two or three than in solitude.

31. When once taken into practice, it is difficult to discontinue. No; there is no such tendency.

33. Ganja smokers in certain cases worship the plant.

35. It is never consumed illicitly. It can be easily prohibited.

41. A moderate use of it is beneficial as a food accessory or digestive.

47. It is not hereditary.

41(c). It is more injurious.

68. No.

69. Yes.

70. No.

111. *Evidence of Hospital Assistant CHINNY SREENIVASARAU, Prapanna Komity, L. F. Hospital, Bobbili Vizagapatam District.*

1. My father was a native doctor. I have learnt native Pharmacopœia to some extent from him. I have been a medical man for the last twenty-two years. I have treated many bad cases of ganja consumers. I have obtained some information from the habitual consumers. Some of them were under my daily observation.

2. The ganja is prepared here as follows:—The flowering tops, when matured with some black furrowed seeds, are cut from the tree, exposed to night dew, and pressed between wooden planks lined with a gunny piece, with a weight over them. This process is repeated for six or seven days. It is known by the names of ganja, ganja-kali, gynapatri, basavapatri, and madhurakavi. The latter names are applied by the religious men.

7. Yes.

(a) Yes.

(b) No.

(c) To some extent.

(d) No.

A class of men called Kurakula, people who cultivate vegetable curries, cultivate the plant to some extent in their farms. It is also cultivated

by some of the Muhammadans and habitual consumers to a small extent, i.e., 1 to 40 plants.

8. No separate land is set aside for cultivating ganja.

9. The plants are watered till they grow a foot long, and afterwards no water is given to them, except once or twice if the season is dry. When they grow older and older, manure with fowls' excretion is added to the soil. Certain consumers slit open the main stem, insert a small stick of pure opium in the centre of the pith, apply broken pieces of pot on either side of the tree, and tie it tightly with an old rag plastered with mud. The insertion of opium in this way is believed to increase the intoxicating power of the drug with production of much resinous matter on the flowering tops. Certain men daily twist the twigs and the tops with a view of producing good ganja. When the tree is grown old they remove the male trees.

10. It is not cultivated by agricultural cultivators but by the following: (1) Hill people, (2) Musalmans, (3) Brahmins, (4) Telagas, (5) Kurakuli people. The cultivation is common in almost all the villages.

13. It is cultivated in some of the villages of the taluka. Dry soil is said to be good for its cultivation. It can be cultivated in almost all parts of the taluka.

14. (a) Ganja.

(1) Bobbili and old Bobbili, (2) Paltair, (3) Seethanagram, (4) Gollapalli, (5) Mettavalsa, (6) Terlam, (7) adjacent hills. To a small extent for the use of consumers and for preparing ganja confections.

15. The hill produce is considered to be the strongest. Ganja only used in smoking, eating, and drinking. Some poor people drink a preparation called bhang made with the leaves. Both the hill and country ganja is used for the above purposes.

16. Bhang is prepared by some in their houses. It can be prepared from the cultivated plant.

17. By Muhammadans, Kurakuli people, Telagas, and hill people.

18. Bhang is said to lose its effects after a year, while ganja keeps its properties for some two years when preserved with care. When not cared, they both deteriorate soon. Prevention of deterioration is practised by exposing the drugs to sunlight once a week, and packing them in arica grass and gunny bags. Deterioration is said to occur from moisture and formation of germs.

19. Charas is unknown in these parts. Ganja is used for smoking, eating, and drinking in various ways and as an ingredient in external applications. It is smoked either plain or with some quantity of tobacco.

It is eaten in five ways: (1) Compound confections with roasted ganja in ghee; (2) compound confections with cow's milk extract of ganja; (3) plain ganja rubbed and made into balls; (4) boil ganja in cow's milk and prepare ghee from the cream; this ghee is eaten mixed with sugar or in sweetmeats; (5) it is chewed and swallowed pure.

Drinking three ways: (1) By mixing ganja in water with spices and sugar; (2) by mixing ganja alone in water; (3) by mixing ganja in milk with spices and sugar.

20. About $\frac{1}{10}$ th of the Brahmins, Telagas, and Kurakuli people, $\frac{1}{10}$ th of Muhammadans, and about $\frac{1}{20}$ th of Pariahs smoke the ganja in these parts. On the whole, there would be 10 per cent. of the total population.

21. Flat and chur greatly used.

22. No charas used.

23. Never.

24. Mostly Brahmins, Telagas, and Muhammadans. It is generally practised in private, and therefore it is very difficult to make out the proportion. It seems to be prevalent to $\frac{1}{4}$ in the above classes.

25. It is on increase. The dearness of opium of late years seems to be a cause for the increase. The increase in population may also hold good for the increased consumption.

26. Ganja—

Bhang—

(a) 10 per cent.	(a) 10 per cent.
(b) 2 "	(b) 2 "
(c) 10 "	(c) 10 "
(d) 5 "	(d) 5 "

27. Brahmins, Telagas, and Muhammadans. In some it is inherited; and in others it is acquired for various purposes—as an aphrodisiac for enduring fatigue and for enjoying pleasures of intoxication.

28. (a) 1 pie.

(b) 6 pies.

29. For drinking it is mixed with small quantities of aniseed, pepper, coriander, nutmeg, cardamom, sugar, jaggery and milk or water. In smoking ganja, tobacco is generally added. The above said spices are used as bhang massala. The ingredients are ground into a paste before they are mixed with water or milk.

Confection: Ordinary ingredients—spices, resins, sugar, honey, ghee. Exceptional ingredients—dhatura, opium, musk, metallic oxides, various roots (hundred sorts).

30. It is equally practised in solitude and in company to a large extent. Very few among females. Some prostitutes make use of the drink and confections prepared by ganja. When the habit is once contracted, it is continued lifelong. A confection called kutimajuma is given to children for producing sound sleep, good appetite, and as a remedy in dysentery.

31. The habit is easily formed, and cannot be easily left off. Some increase their habitual dose.

32. In certain families it is a custom to distribute ganja drink generally made with milk on festivities, but this is not invariably the rule. There are certain religions in which a drink of this is substituted on certain occasions for intoxicating beverages. Sometimes the maximum dose is exceeded. It creates passion for intoxication. Unless he is strong in his controlling power, his sure to be a habitual consumer.

33. The use of narcotics, onions, and animal food is said to have been prohibited in certain parts of the Shastras and Vedas. This idea is generally prevalent in native minds. It is generally considered a mean action.

34. Bairagis and Muhammadans. The former frequent the place generally, but not natives of these parts. I have learnt from them they suffer from climatic disorders if a stop is put to the use of ganja. The latter class generally acquired the habit by inheritance. Their nervous system requires stimulation naturally, and their controlling power over the use of the drug would be wanting.

35. Its use cannot be prohibited. It will be consumed illicitly. Prohibition would create for them a new passion to other intoxicants as alcohol, or for procuring the drug privately, and thus becoming criminals. This discontentment would never amount to a political danger. When strictly prohibited, they will have recourse to another narcotic according to their means.

36. Some consumers use alcohol in addition, but not as a substitute. A number of men who were alcohol consumers some years ago thought of substituting ganja for alcohol, but the effects of the drug being unpleasant, they have entirely abandoned its use and resumed the alcohol. They were all under my treatment.

38. Flat ganja is more powerful than chur.

39. I have seen cases of injurious effects of ganja in its three forms of use.

40. Ganja preparations are taught in the school of native doctors. Ganja is used in cattle treatment.

41. (a) Ganja in moderation improves appetite. It is digestive.

(b) Yes.

(d) Aphrodisiac.

Brahmins use for (a) and (d); Muhammadans for (d), and other classes for (b) and (d). Moderate habitual use for first few years and moderate occasional use.

42. It is injurious. Gradual perversion of physical and mental energy ensues.

43. Not offensive.

44. Excitement stage. Not refreshing. It produces intoxication. The effects of the drug last for eight to twelve hours. After stimulation, sleep is produced. It does not produce any loughing or uneasiness afterwards.

45. A habitual consumer generally exceeds moderation. Their moral sense, physical and mental energies, though preserved for some years, will be perverted after a time. It weakens the constitution. It does not seem to produce loss of appetite. Induces laziness and habits of immorality and debauchery. Whether in moderation or excess, it is practised by men who are in want of self-controlling powers. As insanity is not produced in all the consumers, I think there must be some predisposing cause in the nervous system of hemp insanes.

46. It deadens the intellect. Produces both permanent and temporary insanity. The following shows the types of insanity under my observation: Out of 5 Brahmins, 1 died, 2 recovered, and 2 remaining; out of 3 Telugas, 1 died, 1 recovered, and 1 remaining; out of 1 Kapu, 1 remaining; out of 2 Velamas, 2 remaining. The Brahmins who recovered have resumed the use, but not yet acquired a relapse. They admit that they were using the drug, but not attribute the evil to their habit. Habitual excessive use is undoubtedly injurious to health. It produces, besides the evils from moderate use, anæmia, piles, somnambulism, and emaciation.

47. In some the use of ganja and bhang is hereditary. Children of moderate consumers are not affected.

48. The result is the same as above.

49. Yes; practised as an aphrodisiac. It is used by prostitutes. The evil effects are the same for whatever purpose it is used. Never produces impotence in young. Habitual excessive use produces impotency in advanced age in many, i.e., from 50 years upwards. Some consumers eat the drug for aphrodisiac properties, but the narcotic effects soon putting them into sleep enjoy their expectations in dreams.

50. It is practised in large doses as an aphrodisiac in the habitual consumers, i.e., to prolong the retention of semen in sexual intercourse. Large doses are used by prostitutes when they get more visitors in a day. Large doses are always attended with hallucinations and delusions. There are cases in which the consumers of large doses having been suspected by their relatives that they are possessed were beaten black and blue to drive off the evil spirit from the consumers. Inhalation of chilly smoke is practised, nearly suffocating the man with irritating gas. These consumers, for fear of exposing themselves as ganja-eaters, patiently bear the tortures under the intoxication of the drug.

51. The habitual consumers, whether in moderation or excessive in use, are generally debauchees and thieves. The former is due to aphrodisiac properties, and the latter for the want of money to meet the expenses of their favourite drug.

53. I have not heard or seen any case of homicide.

55. Complete stupefaction can be induced by the administration of some of the preparations of ganja, and also by ganja alone.

56. The effects of hemp vary according to the substances mixed with it. Certain confections prepared by native doctors contain dhatura, opium, certain resins, almonds, walnut, musk, spices, ghee, honey, sugar and some roots; and in some metallic oxides and compounds are mixed, such as oxides of iron, copper, silver, and gold. One of the noted consumers of the confection of ganja prepares yearly 4 maunds of the confection for his self use. Those who eat pure ganja, one told me that they cannot eat this gentleman's confection more than the size of a hazel nut. It is made with all the roots that can be found in the world from poisonous to inert, with most of the native metallic preparations, with all spices and with drugs procurable in bazaars. This gentleman eats it twice a day, balls of the size of a large lime.

57. Ganja is in the form generally eaten and drunk. The effects are all the same, whether smoked or eaten. Habitual smokers attribute the evil effects to eating and the eaters to smoking.

61. Charas is not produced, and it is unknown to the public here.

62. No separate cultivation for bhang.

66. Sellers of ganja and confections are to be separately taxed. The latter sale fetches more profit.

67. The present method of taxing ganja is not felt by the consumers.

68. There are no licensed shops or houses for the sale of this drug.

69. The opinion of the public would be as good and necessary as for opening houses and shops for other intoxicants.

Oral evidence.

1. I am a Hospital Assistant, and passed out of the Madras Medical College in 1871. From 1871 to 1875 I was in the Maharaja's employ. Since then I have been employed by the Local Board. I have not had any special experience in the treatment of insanity.

25. I have been observing ganja smokers and ganja eaters in Bobilli and the surrounding villages, and have noticed some increase of the habit.

46. I have had cases of insanity under my treatment in Bobilli, both at the dispensary and in my private practice. Of the eleven cases I have mentioned, nine belong to Bobilli and one to a village near Vizianagram. There are 14,000 people in Bobilli. The Bobilli cases were cases of insanity lasting for years, and not of a temporary kind. I am sure that I treated two cases from outside Bobilli, and five of the cases which occurred in Bobilli itself. I did not know the patients from outside Bobilli before they became insane. I knew three of the five Bobilli patients before they became insane. I have been seventeen years in Bobilli. I do not think that hemp by itself produces insanity: there must be some predisposing cause. I do not remember any predisposing cause in the cases I have mentioned, and I have kept no notes. I see so many consumers of ganja who do not become insane that I think some predisposing cause is necessary to produce that result. Many Brahmin pandits, consumers of the drugs, are acquaintances of mine, and they are all in full

possession of their senses. These pundits are as a rule moderate consumers, but some of them go to excess. I see more of moderate consumers than I do of excessive consumers. The number of the latter with whom I am brought in contact is small. Though my experience of excessive consumers is comparatively limited, still I have seen enough to say that I do not think excessive consumption of the hemp drugs can cause insanity without a predisposing cause. My opinion is based on my observation

of excessive consumers who have not suffered in their intellect, the number of whom is larger than that of the excessive consumers who have become insane. The reason why I do not refer to the cases I have mentioned of excessive consumers, who have become insane as furnishing the basis of my opinion, is that I have no notes of the enquiries which I made in their cases, and am not therefore prepared with their histories. I think all of these cases must have had a predisposing cause, but I cannot remember.

112. *Evidence of Hospital Assistant P. NARRAINSWAMY TELUGA, Parvatipur
Vizagapatam District.*

1. The opportunities have been limited. A few cases came under my observation while resident in Salur.

2. The products of the hemp plant are known in this province as (1) ganja, (2) bhangu or bhang. The former is smoked with tobacco, while the latter is a preparation of hemp leaves with spices, sugar, etc., and is either eaten or mixed with water and drunk.

7. (a) Yes; a few of those who are in the habit of using the drug grow it in small quantities on available portions of their compounds.

(b) *Vide (a) supra.*

14. (a) and (b). Prepared by those who use them to the extent required for their personal use, as far as my knowledge extends.

16. Bhang is generally prepared by the people in their houses.

17. In my experience people of all classes use it.

19. Ganja is used for smoking and preparation of bhang.

20. As far as my knowledge goes, people of all classes smoke it. The proportion is very small.

21. Flat ganja.

29. Ordinarily tobacco is mixed for smoking, for what reason I cannot say. Those who use it have stated to me that the admixture of tobacco improves the taste of the smoke and prevents cough.

30. As far as my knowledge goes, the drugs are consumed in company. The consumption is mainly confined to the male sex, but to no particular time of life. It is unusual for children to consume any of them.

31. The habit is easily acquired and difficult to break off. There is a tendency in the case of both bhang and ganja for the moderate habit to develop into the excessive.

34. It would not be a serious privation to any class of consumers to forego the consumption of any of these drugs. My reason for this opinion is that I have known men, who have been habitual consumers and who have found their way into prison, not to suffer anything beyond a craving for a few days, after which the feeling passed off and the men's health in no way suffered. I am unable to give any numbers of each class.

40. Ganja is used in the practice of native doctors in the form of pills mixed with spices and sugar and usually called "laham." It is administered in cases of dysentery and diarrhoea and and as an aphrodisiac. I am not aware whether it is used in the treatment of cattle disease.

41. Bhang and ganja may be beneficial in their effects as food accessories or digestives and giving staying-power under severe exertion or exposure. I know nothing of their action as a febrifuge or preventive of disease in malarious and unhealthy tracts. I am aware of no particular class who use the drug for the above purposes; but, speaking generally, I refer to the moderate occasional use of the drug in the above statement.

43. Yes.

44. The immediate effect on the habitual consumer of bhang or ganja is that he feels refreshed. The drug does not intoxicate, but stimulates him. It creates appetite. The effects last for about five or six hours, as far as I am aware; and after they pass off a sense of depression is experienced. The habitual consumer, as far as I know, rarely looks for the repetition of the drug till the following day, when a longing is set up and remains till gratified.

49. Occasional moderate use is practised as an aphrodisiac. I am not aware if it is so used by prostitutes, nor am I aware whether it has any injurious effects in this connection, nor whether it produces impotence. I have not met with any case of impotence attributed to its use.

113. *Evidence of Hospital Assistant JAGANNATH PANDIT, Uriya, Russellkonda,
Ganjam District.*

1. My answers are based upon my own observation, complaints made by persons using the drug, and informations from my friends.

2. Accepted.

As charas is not used in this part of the district, I cannot give other informations regarding this, except that it is in use in Khond Mahals and in Orissa.

Accepted. Round ganja and chur are not used in this part of the district. Flat ganja only is in

use. Ganja is also called by the names of basava patri (among Telugus) and sukha bhang among Uriyas and Muhammadans. Siddhi, bhang, subjee, or patti is also called by the names of kusuma and pania. I do not know the different names of charas.

3. Ganja plant spontaneously grows in this district, as also in the Central Provinces, Khond Mahals, and in Orissa. It is abundant in some places of the Agency tracts of Ganjam and Khond

Mahals, but it is not so much useful as that cultivated.

4. I do not know any other name of the plant.
5. Wild hemp does not grow in this district, and so I know nothing of it.

6. Not known.

7. (a) and (c) Most of the Uriya people cultivate the hemp plant in their yards. It is greatly cultivated in the Agency tracts and in some zamindari villages. In my opinion more than Rs. 5,000 of ganja is cultivated in a year in the district together with the Agency tracts.

8. There is increase in the area under cultivation in the Agency tracts and decrease in the plains. The reason for the former is that, there being no license, the inhabitants cultivate, import, and sell freely in the public markets; and for the latter, that they cultivate to such an extent as is sufficient for their own use, and some cultivate very secretly.

9. In the commencement of the rainy season seeds are sown in well-manured ground. After the plants grow nearly a foot in height, they are removed and transplanted at a distance of $2\frac{1}{2}$ to 3 yards to one another. Manures of cattle and fowls are then put at the roots of the plants for strengthening them; but the water made dirty by fishes having been washed with it is preferable to the above manures. After they reach a height of more than a yard, they are twisted occasionally and the small branches are smoothly rubbed with palms, by which means the big leaves will fall off. The seeds will not be too many, and the flower tops will, as a rule, be larger. Before these flowering tops are formed, some people, who desire more intoxication, split longitudinally the stems of the plants, insert opium, and then tie them well with a string, so that union will take place; and some get the plants poisoned by cobras.

In the middle of the cold season, when the plants are well ripened, they are cut down and exposed to the sun during the day-time and to moist during nights for five or seven consecutive days: by this means some resinous matter will be formed in the flowering tops. Those that require still more intoxication sprinkle well the juice of the dhatura leaves and seeds before they are so exposed. By this exposure the pungent odour of these new green plants will evaporate. They are then lightly tied up into bundles in order to be well compressed, rolled in straw, and preserved.

10. The persons who cultivate hemp do not form a special class. A person of any class could cultivate.

11. I do not know anything about wild hemp.

12. I know nothing of wild hemp.

13. It is not restricted to this province only. The cultivation is common to almost all the districts in the presidency. Places of cold climate, black soil, having rainfall above 60 inches, elevation above 500 feet above sea level, are favourable to the growth of hemp. Its cultivation is, I think, impossible in sea shores, sandy and rocky places.

14. (a) and (c) are prepared in this sub-division. They are prepared largely in Agency tracts and in zamindari Uriya villages. About Rs. 2,000 worth of ganja and bhang are prepared in this sub-division.

15. The preparations of the cultivated hemp are (A) smoking, (B) eating, and (C) drinking.

(A) The methods used for smoking are as follows:—

(i) A few agglutinated flowering tops are taken, put on the palm of one hand and rubbed well by the thumb of the other. The seeds and pieces of sticks are separated; a few drops of water are then added to make it pasty and to prevent its consumption soon, and nearly equal quantity of tobacco is mixed to promote its strength. It will then form a gummy lump. A small pebble is put into a chillum (earthen thing resembling a straight pipe), or a leaf made like it, to prevent any portion of the lump coming to the bottom, and then the hemp is placed over it. A little fire is placed over it, and the consumer, wrapping a piece of wet cloth to the lower and narrow end of the pipe, holds it in one hand, and putting the other over it in such a way that the hole of the lower end is between the thumb and the index finger of the latter, and also that the smoke is not allowed to escape. He then begins smoking. The reason of wrapping the wet cloth is to prevent scalding to the fingers, to purify the smoke, to prevent any portion of the lump coming into the mouth, and not to allow the smoke rushing at once into the air passages. This is the worst and most injurious method of smoking, but it is very commonly used.

(ii) Some who desire the smoke well purified, use it in a hukka or gudgudi in which they keep water through which the current of smoke passes. By this the smoke is better purified than the above method.

(B) Different methods of eating:—

(i) As mahajum or majinum:—this is prepared as follows, and sold ordinarily in bazars: Ganja and its leaves are well dried and powdered, jaggery or sugar mixed with a little water is melted until it becomes gummy, and the powder is then proportionately added to it. Afterwards it is well stirred till it becomes one mass. Of that mass small lumps are taken out and made into balls, each weighing $\frac{1}{2}$ to 1 tola. This is used by ordinary people.

(ii) Modaka, madanakameswara, and meenaketana are prepared by native doctors according to their formulæ laid down in books. In these, besides hemp, bazaar spices, such as cloves, cinnamon, nutmeg, mace, ajwain, poppy seeds, etc., sugar, ghee, some drugs of vegetable kingdom, and some oxides are proportionately added, made into balls, each weighing about $\frac{1}{2}$ tola or so, and used. This is taken by somewhat richer class of people who could afford to procure them.

(iii) Ganja is proportionately well boiled with milk, well squeezed and strained, the refuse being thrown away. By ordinary process ghee is taken out from this milk. This is used by the richest class of people.

(C) Drinking:—

(i) Generally the leaves of hemp plant are well washed with water, ground well with certain spices (such as pepper and some of the above-mentioned spices), and the mass is then proportionately mixed with sugar-water or milk and sugar, or both, as the person drinking it could afford, and the mixture is taken. The mixture is strained by some before drinking, and by others it is not, according to choice.

(ii) Some delicate people who require slight intoxication tie up the above said things in a piece of muslin or thin cloth, put in a sufficient quantity of milk, boil it for an hour or so, then the bag is taken out and squeezed and the milk

is taken. The abovementioned two preparations are made of ganja in cases where leaves are unavailable or when strong intoxication is required. In all these preparations (B) and (C), sugar, mace, nutmeg, and milk are invariably added with the object that these things promote intoxication.

16. Bhang is generally prepared in the house. It can be prepared from the cultivated hemp plant, whether male or female. As for wild hemp, I know nothing.

17. The preparations of hemp are generally made by sweetmeat-makers as majinum; by native doctors as modaka, madanakameswara, and meenaketanam; by the richest classes of people as ghee; by ordinary people as water or milk bhang.

18. They do deteriorate by keeping. They lose their effect after a certain time. Ganja with ordinary care may keep good for three years and bhang (leaves) for one year, and for charas I do not know. The causes of deterioration are that the resinous matter dries up; that it is eaten away by insects; that the united flowering tops are separated and consequently fall down. In order to prevent deterioration it should be well rolled, covered with straw and rags, and kept in such a place where there is no access of sun and air.

19. Ganja is not only used for smoking, but also used in the preparations of majinum, modakam, madanakameswara, meenaketanam, and rarely as bhang, when leaves are not available or when strong intoxication is required. It is generally used throughout the district. I know not about charas.

20. Almost all classes of people, except Europeans, Eurasians, Khonds, and Sarvaras, smoke ganja, specially classes that are prohibited from drinking liquor. Generally throughout the district, I believe 10 per cent. of the population smoke ganja.

21. In this subdivision only flat ganja is in use.

22. I do not know.

23. When ganja is not procurable, bhang leaves are very rarely used for smoking; but the intoxication thereby produced being very slight it is not cared for.

24. Of the population of this district, Europeans, Eurasians, Khonds, and Savaras excepted, more than 15 per cent. eat and drink bhang in its different preparations, as stated above in answer No. 15 (C).

25. The uses of several different preparations, stated in answer No 15 (B) and (C) are on the decrease, considering the proportionate increase of the population at the present day. The main reason which I can assign is the advanced civilisation which drags towards different spirituous liquors and the reformed societies.

26. Seventy per cent. of the consumers fall under (a), 15 per cent. under (b), 5 per cent. under (c), and 10 per cent under (d).

27. Almost all the classes of people, except the classes mentioned in answers Nos. 20 and 24, indulge in ganja and bhang under the following circumstances: The primary object of smoking ganja is to concentrate the mind (on religious points), and the secondary objects are in order—aphrodisiac, invigoration of digestive powers, prevention of malaria, and society. The chief objects of taking bhang are to cool and strengthen the system (as used by bairagis, gymnasts), to

invigorate the digestive powers, to strengthen the nervine powers, and to follow the track of society.

28. The average cost of ganja for (a) is about one anna per diem, considering the existence of present license system, and about two annas for (b); and that of Lhang $\frac{1}{2}$ an anna for (a) and one anna for (b). As for charas, I do not know.

29. In ganja, tobacco is ordinarily mixed, and dhatura is exceptionally mixed with the object that they may promote and retain intoxication for a longer time. In bhang, bhang massala is used. The ingredients of bhang massala are nutmeg, mace, poppy seeds, pepper, cardamom, cinnamon, cloves, dry ginger, etc. The articles are mixed to increase intoxication and to produce good smell and taste. The ingredients of bhang massala of this district are generally the abovementioned articles.

30. Amongst the consumers, 75 per cent. practise in company and 25 per cent. in solitude. It is mostly confined to the male sex; but in very few cases, females, too, practise in them. As the children do not consume them, it could be safely said that it is confined to the time of life above 12 years of age. As for charas, I do not know.

31. Yes; the habit is easily formed by keeping company with habitual consumers. With slight difficulty the habit can be broken off. There is every possibility that there is a tendency in these drugs for the moderate habit to develop into the excessive. I do not know about charas.

32. Offering ganja and bhang is the social custom among the bairagis and the gymnasts respectively. This is done when two or more meet together, or when one goes to other or others to have conference. Such offering is regarded as essential. It is generally temperate. It certainly leads to the formation of the habit, and undoubtedly is injurious. I do not know about charas.

33. Smoking ganja is more hateful than drinking bhang when used by family people; but when both the drugs are used by bairagis and other religious people, they do not mar their reputation in the eyes of the public, because they do not practise them as aphrodisiac or for any other temporal good, but for having their mind concentrated on religious views, and also as unaphrodisiac. To gain these objects, they practise them rather excessively from the very beginning and at any time they like. Such people keep some regard in them. In this subdivision I have never seen or heard any class of people worshipping hemp plant; but before their use they are offered to god by the consumer or consumers. According to Hindu Shastras, Hanuman was born on the day of Mesa Sankranti (probably 12th April), and it is on that special day, bhang is offered to him and taken generally by all.

34. Yes; specially to bairagis and other religious people that indulge in it. The reason is that the abovementioned people cannot have their mind fixed on religious points unless they are entirely free from jealousy, covetousness, and lust; and for family men, it is not so serious. It would be a serious privation to 90 per cent. of bairagis to forego the consumption of the drug and to 10 per cent. of the family men and others.

35. It would not be feasible to prohibit the use of these drugs. Yes, it would be consumed illicitly. The prohibition could not be enforced without occasioning serious discontent to the consumers. I think no political danger would occur in this part of the country by such discontent; but it

may cause to a certain extent in the North-Western Provinces and Punjab. The prohibition may probably be followed by recourse to alcoholic stimulants by the rich who could afford and to other drugs by the poor who could not afford alcoholic stimulants.

36. Yes; there is reason to think that alcohol is now to a certain extent substituted for these drugs. The causes which I assign are advanced civilization, reformed societies, and the idea that ganja is a great depression and makes a man dull and lazy.

37. As I do not know about charas, I am unable to answer this.

38. Flat ganja is only used in this part of the district, so I am unable to state the different effects.

39. Smoking ganja is more injurious to health than eating or drinking in its different preparations, as it directly passes through the air passages and irritates them. But smoking by *buka* or *gudgudi* is preferable to dry smoking by *chillum* [*vide* 15 (A)], as in former cases, the smoke is somewhat purified by the water kept in them.

40. Ganja and bhang are widely used in medicines by the native doctors for eating and drinking purposes, but not for smoking. I do not know about charas. Ganja is scarcely used in cattle diseases.

41. Ganja and bhang, if recommended by doctors (native), in combination with other drugs in moderate doses, and taken occasionally for short periods, have some benefit in their uses.

(a) Both as a food accessory and an aphrodisiac.

(b) Bhang alone gives staying-power under severe exposure to sun and alleviates fatigue.

(c) Smoking ganja is believed as a febrifuge or preventive to malaria in unhealthy tracts, which I cannot believe, and, if at all so, it is for a new consumer and for a short period, till he is accustomed to it, when it will be more injurious.

(d) Drinking bhang cools and strengthens the system in hot seasons. Almost all the classes, except those that are mentioned in answer Nos. 20 and 24, use the drug for the above purposes, and about 20 per cent. use so.

The above answers refer to both moderate habitual use and moderate occasional use of the drug. I know not about charas.

42. Moderate occasional use of eating and drinking ganja and bhang under medical advice with the admixture of the other medicinal drugs in proper doses in their different preparations (*vide* answers Nos. 15 (B) and (C)), is harmless, because they are widely used to cure diseases and to improve health by doctors of different races. I know not about charas.

43. All sorts of consumers are offensive to their neighbours. But it is not so when recommended by doctors and taken as stated in the previous answer.

44. The immediate effects of moderate use of smoking ganja on a habitual consumer are slight intoxication, refreshment, allaying hunger, aiding slightly the digestive process, and keeping the bowels slightly free, but it does not create appetite; and these symptoms are temporary, lasting about an hour or two. The immediate after-effects are—after free from the intoxication—great exhaustion, weakness, excessive thirst, sometimes headache, giddiness, etc., in case of empty stomach and followed by sleep. It does produce longing or uneasiness. The immediate effects of moderate use of drinking bhang on a habitual consumer are

slight intoxication, great refreshment, allaying hunger when taken in empty stomach to a certain extent, creation of appetite, and cooling and strengthening the system. The after-effects are increased appetite, uneasiness, dullness of mind, and if proper food is taken sound sleep ensues. This also produces longing and uneasiness, but not so much as smoking ganja. I do not know about charas.

45. Smoking ganja moderately does produce noxious effects, physically, mentally and morally, to the family people, but not to the bairagis and other religious people who are accustomed to it, though in some cases the physical strength of the latter may be affected. Drinking bhang moderately does not produce any effect physically even to family men if they are accustomed; but it may produce some bad effect mentally and morally to them, and nothing to bairagis and other religious people who are accustomed to it. Except moderate use of drinking bhang, all forms of smoking ganja impair the constitution of family men as well as bairagis or other religious men to a certain extent. Moderately smoking ganja, even occasionally, in my opinion, injures digestion and causes loss of appetite in due course of time; but occasional moderate eating of ganja in different preparations, as stated in answer No. 15 (B), under a doctor's advice, does not cause loss of appetite or injure digestion. Moderate use of smoking ganja may cause dysentery, bronchitis or asthma, both to those who are habituated or not habituated to it, and sometimes even when taken occasionally; but eating ganja or drinking bhang occasionally (*vide* answer Nos. 15 (B) and (C) for their different preparations) in moderate doses may not do harm to those who are accustomed, and it does not cause the abovementioned diseases even to those who are unaccustomed, except slight intoxication, giddiness, loss of memory, great depression in spirit, excessive thirst, and deep sleep temporarily. Habitual moderate use of smoking ganja or drinking bhang may lead to undue laziness, habits of immorality or debauchery to all classes of consumers, with the exception of those who indulge in them intentionally to devote their time specially in religious matters. Moderate habitual use of smoking ganja and drinking bhang may deaden the intellect or produce insanity to some people who are especially weak and of bilious temperament, and if taken when the person is much exhausted and tired with fatigue and hunger.

Excessive use of smoking ganja will produce insanity. The type may be called as mania. It is permanent, though the person may have temporary relief from that insanity in case of his not using the drug for some time. The following typical symptoms may be noticed in a person who becomes insane by smoking ganja: his countenance will be dull and heavy as a stupid; he will talk much unnecessarily or will be mute; laugh or cry spontaneously; wander much or sit quietly, keeping his head down; have a steady gaze; sometimes suddenly get up and go away for a mile or so talking to himself, have disturbed sleep, but he will not do any harm to others. I have not seen insanes in whom insanity was the result of drinking or eating bhang excessively. I believe that an insane who has no recorded ganja history may confess to the use of the drug. As for charas, I do not know. I am of opinion that if a man suffering from mental anxiety or brain disease indulge so much in the use of the drug as to produce insanity, he will become mad sooner than an

ordinary man, and the symptoms better developed in him in spite of his getting relief from the disease.

I am of opinion that insanity may not necessarily tend to indulge in the use of the drug to one, though he is deficient in self-control through weakened intellect.

I am not acquainted with any such case; but I have seen many insanes of weak intellect not using the drug.

46. Smoking and eating ganja and drinking bhang in excess, whether habitual or not, certainly produce noxious effects physically, mentally and morally. They do impair the constitution, injure digestion, and cause loss of appetite. They may cause chronic bronchitis, asthma, and other diseases of respiratory system, nervous disorders, chronic gastritis, etc. Smoking ganja excessively certainly brings on in a short time consumption, dysentery, etc.; whereas drinking bhang and eating ganja, in my opinion, are not causes for dysentery. As for charas, I do not know.

47. The use of these drugs is not at all a hereditary one.

48. None.

49. Moderate use of ganja and bhang is generally practised as aphrodisiac, and so used by many prostitutes. As aphrodisiac, it is more injurious to health than as a narcotic. The reasons are that when ganja and bhang are used for their aphrodisiac properties they do not act so well as they do in the commencement, for, after a certain time, the person becomes habituated to it, and increased doses are therefore required day by day, which is no doubt injurious; and also by using the drugs as aphrodisiac, it will at once cause the person great exhaustion and depress the nerve powers to a great extent by their abuse. The use of ganja and bhang as aphrodisiac may bring on impotency, as there are all possibilities in them for having a tendency to their excessive use.

50. Excessive use of ganja and bhang, though used sometimes as aphrodisiac by prostitutes, will at once bring on several complicated diseases

(such as diseases of respiratory, nervous and digestive systems, palpitation and valvular diseases of heart, dysentery, etc.) It is more injurious to health and makes impotent by using it for a short period.

51 and 52. I do not know.

53. Excessive indulgence in smoking ganja or drinking bhang may incite unpremeditated crime. I know a man once drunk an overdose of bhang and fell into a well. I cannot say whether it was intentional or accidental. I think that it also leads to permanent frenzy, though he may have temporary relief. I know that a man (some three years ago) who indulged excessively in smoking ganja for less than a year, became mad. Once he entered into a European gentleman's house in day time and was wearing the gentleman's dress when the servant saw him and dragged him from the house. The same man on another occasion entered into a school, took away some books, etc., and threw them in a jungle. I know not about charas.

54. I think they are rarely used in the present day (ganja and bhang). I do not know about charas.

55. Overdoses of ganja and bhang could stupefy persons, hence may be given by criminals to their victims. By overdoses complete stupefaction could be induced without the admixture of any other drugs, though the person could sometimes be able to speak incoherently and murmur or bawl out slowly. I do not know about charas.

56. Moderate use of ganja and bhang by a habitual consumer does nothing but a slight intoxication and satisfaction to him, but to a new person it makes timid and causes excessive thirst, etc. If taken in excess, the above-mentioned symptoms are aggravated more and sooner to a new person than to a habitual consumer. If dhatura is mixed in them, they make the person worse. I know not how it is administered to others. I do not know about charas.

57. I do not know.

114. Evidence of Hospital Assistant MAJURANAYAGUM PILLAI, Vellala, Uravakonda, Anantpur District.

1. During the course of medical profession.

3. Throughout the presidency; but especially in Masulipatam, Trichinopoly, Tanjore.

14. (a) and (c) is prepared. In Trichinopoly and Tanjore. For their own use and to small extent.

16. Bhang is prepared in their houses. It can be prepared from the plant. Ganja can be prepared from the plant. Know nothing about charas.

19. Ganja is used for smoking. It is also used in criminal cases throughout the presidency.

20. Goshas and beggars, especially town people, also use, from the lowest to the highest. In choultris and lonely places.

24. Drunkards (especially lowest caste people), do eat and drink bhang. Madras, Nellore, Ganjam, Masula, Trichinopoly, and Anantapur.

25. On the increase. Brandies and other liquors being valuable, they cannot afford to buy, and consequently they use ganja and bhang.

28. Two annas per diem.

32. During Muharram festival, ganja and bhang is used, as it is the custom for them to take it during those days.

33. Consumption of each of these drugs is generally regarded bad. No such custom of worshipping.

39. Yes; it is injurious to health. It produces derangement of the system, shortens the life. There is loss of muscular and nervous power, amaurosis.

41. Not beneficial in its effects.

42. Moderate use will prove harmless, because it produces no intoxication, etc.

43. Not offensive to their neighbours if consumed moderately.

44. For habitual consumer it produces little or no effect. It produces little intoxication. It allays hunger and produces no appetite. After-effects are bad by weakening the system and impairing the digestive organs.

45. It produces noxious effects. Physically.

impairs the body; mentally: affects the sense. No morality towards those who take these drugs.

49. It is considered to be an aphrodisiac.

51. Yes; the crimes that they commit have not come to my notice.

53. Excessive indulgence of these drugs, no

doubt, produces unpremeditated crimes. No cases occurred during my life.

54. Yes.

55. Criminals often partake these drugs in order to increase their designs and stupefy themselves. Complete stupefaction can be induced without the aid of any other drugs.

115. *Evidence of Hospital Assistant C. M. APPATHORAI MUDALIAR, Vellala, Chairman, Union Panchayat, Hindupur, Anantapur District.*

1. As an Hospital Assistant, I know the production and the effects of this drug named hemp.

2. This is styled only by name ganja or bhang leaves in this part of the country.

3. I do not know; but I have seen a few plants in this district.

4. It is known as ganja. Yes; it refers to the same plant.

5. I do not know.

6. Very scattered.

7. (a) Yes.

(b) to (d) No.

8. No cultivation of this plant in this district.

9 to 12. I do not know.

13. Yes; it is restricted in this district.

14 to 18. No.

19. Here it is known as ganja, and it is used for smoking.

20. Muhammadans and Boyas.

21. Not known.

22. Native.

23. Yes; it is used in these localities by a few Boyas and Muhammadans.

24. A few of the above-named classes eat bhang.

25. It is on the decrease in these localities owing to the want of the drug, the sale of which is prohibited unless licensed.

26. Very few.

27. Mainly Boyas and Muhammadans take this only for intoxication.

28. Not known.

29. Equal parts of tobacco and ganja are mixed for smoking.

For eating a confection is prepared. The following are the ingredients:—Ganja 1 part, nutmeg $\frac{1}{4}$ part, maize $\frac{1}{4}$ part, cloves $\frac{1}{4}$ part, cardamoms $\frac{1}{4}$ part, jaggery quantity sufficient, rubbed well in a mortar and made into paste or confection. About 20 grains taken at a time.

30. Not known. Here it is confined to male sex, and it is not used for children.

31. Yes; it is easily formed, and it is difficult to break off. Moderation of these drugs brings on to excessive.

32. None.

33. It is not mostly regarded.

34. No, as it is not much used.

35. It is feasible to prohibit them; it will not be consumed illicitly. The prohibition can be enforced by the strict prevention of sale and cultivation. It will not cause serious discontent among consumers. The prohibition of these drugs may give recourse to alcoholic stimulants.

36. No.

37 and 38. Not known.

39. Drinking and eating it less injurious than smoking, which affects the lungs and heart.

40. Here no native doctors use the drug. None use in cattle disease.

41. It has beneficial effects.

(a) It promotes digestion.

(b) It alleviates fatigue.

(c) Its effects not as a preventive of disease in malarious and unhealthy tracts.

Here Boyas and Muhammadans use the drug in moderation for the purposes mentioned under (a) and (b).

43. Yes; I have not seen any one, who use ganja moderately, is offensive to any body.

44. It produces intoxication, creates appetite. After each smoking the effects last one to one-and-a-half-hour. The after-effect is uneasiness.

45 and 46. I have not observed any noxious effects. In some, when taken in excess in the form of smoking or eating, without sufficient food, it impairs the constitution and brings on dysentery, bronchitis and asthma.

I observed two cases in this town,—one male, and the other a female, both of them using the drug in excess, and they became insane. The female was found violent, and she was sent to the Madras Lunatic Asylum. She was discharged from the asylum cured after six months. I saw her after she returned from the asylum in good health. The male was a goldsmith, who was kept in confinement by his relatives for some time without being allowed any resort to the drug. He is now perfectly well, and does his work. Under the above circumstances, I am of opinion that excessive smoking or eating of the drug tends to temporary insanity.

47. It is only a habit. I have seen some children of habitual moderate consumers in sound health.

49. It produces an aphrodisiac effect on the system.

51 and 52. I do not know.

53. No.

54. I do not know.

55. No.

56. I do not know.

57. *Vide* question 45.

58. It is not an improving state here.

60. It is not cultivated.

61. It is not produced.

62 to 64. Not known.

65 and 66. Yes.

67 and 68. No.

69. Yes.

70. Not known.

Oral evidence.

1.—I have passed the first class examination for Hospital Assistants. I have been in Government employ since 1880. I have had no special experience in insanity.

45.—I only know these two cases of insanity attributed to hemp drugs. One was sent to the asylum. The other was a goldsmith, who used to take a ganja pill, and also smoked excessively. The pill is the one described in answer 29. It is the pill consumed in the place where he smoked. His people told me this was its composition. He took no opium or spirits. He was not sexually immoral. He was only a goldsmith by caste. He wandered in the streets and used to smoke with this company. He never lived with his relatives. He always stopped in the house where the smoking was, the small room rented for the smokers. He became an excessive smoker in 1886, and became mad three or four months

after. Before 1886 he was all right and used to work at his business. For eight months he went about in the dissipated way I have described. He was insane. He was then confined by his friends for three months and then he became all right. His family are all healthy people. He is not married. I treated him for some slight ailments before 1886. He was not a ganja-smoker then. I do not know why he took to the drug. His business was not falling off. He never had smoked ganja at all until he took to it in this way to excess. I do not know anything about the father or further back relations: not what kind of men they were or what they died of. But I know his mother and sisters; they are all right. I never treated this man for his insanity. I had no reason, therefore, to make further inquiry as to the cause of insanity beyond the ganja. If he had been my patient, I would have asked about whether his parents were afflicted with insanity or addicted to drugs. I did not make these inquiries.

116. *Evidence of Hospital Assistant I. PARTHASARATHY CHETTY, Penukonda, Anantapur District.*

1. As a medical man—Hospital Assistant in the Subordinate Medical Service—travelled whole of Northern Circars and some parts of Ceded Districts, and came across native physicians who generally use the hemp plant among other drugs in medical preparations; besides, I have had opportunities to often know the effects of the drug as it is smoked, from ascetics, with many of whom I spent my leisure moments in their philosophical discussions.

2. As popularly understood by people in these parts of the country, there are two sexes in this plant as in all other plants—male and female plant.

Male plant has smaller leaves (called flowering tops when ripe), knottily and thickly shrouded together with twigs at regular intervals. These tops are gummy and yield resin, has also seeds contained in these tops. These gummy leaves or tops form the official part for narcotic properties. Plants of branchlets of slightly red colour are said to be the best, while those of white colour are comparatively of less value; apparently no flowers.

Female plant has not these tops as distinguished from the leaves it is with; has well marked flowers and also seeds of less size, appearing sparingly unlike in male plant; does not yield resin.

There is another kind of this plant, jogi bhang tree; the twigs and branchlets are blue black in colour while green. In this kind flower and flowering tops sparingly appear. Yields resin. This is considered most intoxicating in its effects.

Ganja as understood here is the flower tops (the grouped small leaves) of the plant male, used along with tobacco for smoking purposes.

Charas.—I do not know anything of this. I read in books it is applied to the resin.

Bhang is prepared from mixing in certain proportion the paste of the tops in sweetened sugar along with spices.

3. Nellore and some parts of Anantapur, mostly at Penukonda.

4. It is known by the name of sidda pathri both in Telugu and Tamil. It is also named vanai karpam, karpam and karakarmuly in Tamil.

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5. Black cotton-soil is said to be favourable to the growth of the plant, whether of spontaneous or cultivated birth.

6. Scattered.

7. Yes, for private consumption—

(a) for production of ganja; and also

(c) for bhang.

The plants are grown to a limited extent within the private yards of Muhammadans and also of Hindus. They can be also found in the gardens attached to the muttams of Hindus and makkams of Muhammadans.

8. Recently there appears to be a decrease in the cultivation of the plants, for the people in general are now under the impression that the cultivation of the plant even for private consumption is not allowed by the State, and it is, if discovered, visited with penal restrictions.

9. The plants, if for private consumption, are well taken care of in all the processes of their cultivation calculated to infuse narcotic properties into them. Debris of dead snakes, *ptycholis fructus* and excreta of fowls, if used for manure, are each of them considered very favourable for the growth of the plants. At about fifth month of the growth of the plant, it is twisted a little at its trunk, and at the breaks of the rind in result of this, opium and assafoetida are inserted to increase the intoxicating effects.

10. Yes, they form a special class. Very seldom are found instances where raiyats or agricultural cultivators are engaged in the growth of the plants for private consumption. But it occurs that raiyats grow a few of these plants in their fields to answer the occasional demands of fakirs or gosains.

11. Yes, there is no difference in respect of seeds between the plant cultivated and the one of spontaneous growth.

12. I do not know. As understood here, the male plant, on the contrary, is the kind used for narcotic purposes, and it is the female plant that is extirpated as useless—*vide* my answers under query 2.

13. The cultivation of the plant for private consumption is common to all districts as far as I

2 x 2

know. No special condition of soil is required. Rainy season is said to be the proper season for the sowing of its seeds. Fall of dew over these plants is considered very favourable for their growth and the growth of resinous principle in them.

14. Yes. (a) Ganja is common. (b) Charas is hardly known in this part of the country. (c) Bhang is also common, but to a less extent than ganja.

Ganja and bhang are universally known in the districts I travelled—Ganjam, Vizagapatam, Godavary, Kistna, Nellore, Kurnool and Anantapur.

15. Ganja.—The tops are soaked in water, and then pressed against in the hands, so that no water might remain in them, and equal quantity of tobacco is added, and smoked. This can be prepared both from wild and cultivated plants.

Charas.—I don't know.

Bhang.—The tops one part; pepper, half; aniseed one part; poppy seeds two parts. These articles are to be well ground into paste; and this paste is mixed in milk and water in certain proportion, sugars and spices having been previously mixed in the milk. Bhang can be prepared both from wild and cultivated plants.

16. Bhang is prepared generally by people in their houses. It can be prepared both from wild and cultivated plants, so is also ganja.

17. Bhang, better known by the name of ramarasam in the Telugu-speaking country, is used but rarely almost by every class of people, from the highest Brahman to the lowest Pariah. Muhammadans, especially fakirs, use this. Generally this preparation is made use of by people clustering themselves into pleasure parties, in which will be found also refined Hindus who loathe the name of intoxicating liquors. I came across such parties in Utiya country, Ganjam district. Rajputs and Mahrattas use the drug in this form very largely, and, it is said, specially during the Kama feast. Ganja is prepared by fakirs and gosains.

18. I don't know.

19. Ganja is, as far as I know, used for smoking. The very word ganja means preparation for smoking.

N.B.—The flowering tops are also made use of along with mutton for the express object of intoxication.

20. As above said, fakirs, ascetics, gosains generally smoke ganja. The proportion of smoking people in Muhammadans is 5 per cent., while it is 25 in Hindus. The class of people that smoke ganja, of Hindus, forms mostly those that abandon the cares of the world in favour of philosophical discussions of divine existence; the same case is with many of the Muhammadans. Ganja is generally smoked in muttams, makkams, and also in houses.

21. The kind of ganja used here is flat one—flattened in bundles under weight.

22. I don't know anything of charas.

23. No; bhang, as understood here, is prepared by making dried flowering tops into a paste and mixing it in certain proportion in milk along with spices and sugar. So bhang is in liquid form for drink.

24. Bhang is used by Muhammadans, especially fakirs, and also by Hindus. The proportion of bhang-drinking people, both Hindus and Muhammadans, is much less than that of ganja-smoking section. Bhang is not daily used, but occasionally.

25. It is as it was ever before.

26. Ganja smoking—

	Hindus.	Muhammadans.	
(a)	2	3	in 100
(b)	02	125	"
(c)	02	42	"
(e)	01	33	"
	25	5	"

27. (a) The first class of people—habitual moderate consumers—is formed chiefly of ascetics and such spiritual thinkers (save a few instances) both in Hinduism and Muhammadanism.

(b) The second class of habitual excessive consumers comprises those that use the drug for the very sake of intoxication.

(c) This class forms those that are initiated recently into the practice.

(d) Occasional excessive consumers are only those that are to qualify in future for habitual excessive consumers. An occasional moderate consumer would be soon a habitual moderate consumer, who will, if imprudent without self-control, turn an occasional excessive consumer to eventually grow a habitual excessive consumer.

28. (a) A tola for two doses—morning and evening—for habitual moderate consumer. It is generally purchased for half anna at the most.

(b) With this class, the quantity varies from two to six tolas a day.

29. (a) Ordinarily along with flowering tops (ganja) is added tobacco in equal parts.

(b) Dhatura is seldom used. However, there are instances of the drug being smoked with dhatura. Dhatura is used to heighten the intoxicating quality. Tobacco is said to modify intoxication of the bare drug.

Bhang is, as it is made, but a component of dried flower-tops with sweetened sugar and spices. I don't know anything of bhang massala.

30. Ordinarily ganja is smoked by people in company. Yes, it is mainly used by males; there are rare instances of females using ganja. As for bhang it cannot be said so, for males, females and children are found using it (bhang) under the popular name of ramarasam.

31. (a) to (c) Yes.

32. Bhang is made use of by Rajputs and also Mahratta people during the days of Kama (Cupid) feast in some parts of this country; yet this is not general. The quantity so used is moderate. It may lead to the formation of habit.

33. The consumption of each of these drugs is not at all countenanced by society, whether Hindu or Muhammadan. The ganja-smoker is shunned out as abhorred, mean and irresponsible in society. He is hissed out in secret as one unworthy of association. He does not hold any social status save in the society of consumers of the drug. Any statement from his lips, even if true and grave, is put down for one coming from a mad fellow. Brahmans and Vaisyas are excommunicated from caste, if found addicted to this vice. This is not the case with those that, as I have above said, use bhang occasionally as a matter of pleasure. For I found Brahmans, Rajputs, Vaisya and Sudras among bhang drinkers.

No custom is obtained here to worship the hemp plant.

34. An occasional moderate consumer can forego the consumption of the drug to any length of time; so is also, though in less proportionate number of cases, with the habitual moderate consumer. But it would be a serious privation to habitual ex-

cessive consumers to forego the consumption of the drug to any shortest length of time.

35. (a) No.

(b) Yes.

(c) I am ignorant of any means.

(d) and (e) Yes, it would occasion serious discontent, leading, in my humble opinion, to a political danger.

(f) Yes, only in a very few cases; for I find in my experience that many that have recourse to the drug loathe the idea of taking spirituous liquors. Muhammadans use the drug (ganja) with apparent sanction of their religious authority; but they cannot, without subjecting themselves to ostracising influences of their caste or religion, use intoxicating liquors (alcohol).

36. I have not seen such instances, but on the contrary found people substituting the hemp drug for alcoholic stimulants, for reason of cheapness of the former: this is mostly among Hindus.

37. I know nothing of charas and so can't draw comparison between the effects of ganja smoking and charas smoking.

38. I don't know.

39. Smoking ganja is less injurious than drinking bhang or eating the drug. This can be best explained by the simple practical fact that tobacco, smoked in the form of cigars, is less intoxicating and less poisonous, if it is at all a poison, than when eaten.

40. Ganja, the tops of the plant, is made use of in medicinal preparations by native doctors. Also it is used in the treatment of cattle diseases, especially as parturifacient.

Uses of the drug as understood by native physicians and its preparations.

Purification of the drug—The officinal parts of the plant are the flowering tops devoid of all seeds and branchlets. The tops are soaked in water for a time, and then squeezed well, so that no moisture might remain in them, and dried in the sun.

Dose of the tops (Ganja)—from two to three grains.

Properties, medical, etc.—Expectorant, astringent, stomachic, narcotic.

The green leaves of the plant are, in cases of gastrodynia or colic, placed over abdomen and kept there for a time by means of bandage. The leaves lessen the intensity of the pain. The tops (dried and purified) are used as parturifacient in the veterinary treatment.

Preparations.—Jajannatha Siddi Lahyum—

Ganja (the flower tops) in fine powder	1 part.
Opium	$\frac{1}{4}$ "
Ptychotis fructus	$1\frac{1}{4}$ "
Powder, equal parts of dried ginger, pepper and long pepper	$1\frac{1}{4}$ "
Cardamom	$1\frac{1}{4}$ "
Cloves	$1\frac{1}{4}$ "
Fruits of emblic myrobalan seasoned in salt	$1\frac{1}{4}$ "
Nutmeg	$1\frac{1}{4}$ "
Rhus succodanea	$1\frac{1}{4}$ "
Catechu	$2\frac{1}{2}$ "
Lime-juice	5 "
Sugar	$12\frac{1}{2}$ "
Pure water	5 "

Water, lime-juice and sugar, should be added together and made into syrup by being heated on fire, and with this syrup the other articles in fine powder should be mixed and well stirred up to the

consistency of confection, opium having been added, previously dissolved in a small quantity of water.

Dose—From three to five grains.

Uses—In the early stages of cholera, it is given to check vomiting and diarrhoea. In colic and diarrhoea of children it is said to be very useful. It is also said that cases of loss of memory improve under the use of this preparation.

Purnadi Lahyum—

Ganja tops	1 part.
Dried ginger, pepper, and long pepper, each	1 "
Leaves of cinnamon nitidium	1 "
Mesua ferrea	1 "
Aniseed	1 "
Cummin seeds	1 "
Galanghal	1 "
Liquorice	1 "
Nutmeg, mace, cloves, cardamom and cinnamon, each	$\frac{1}{4}$ "
Sugar	20 "
Tender cocoanut—water of	10 "
Poppy seeds	1 "

The above articles are all made into the consistency of confection as almost the first.

Doses—From twenty to forty grains.

Uses—In indigestion, diarrhoea, dyspepsia, sleeplessness and nervous debility.

Nidrakari Lahyum—

Ganja in powder previously grilled in ghee	3 parts.
Nutmeg	1 "
Cardamom	1 "
Sugar	8 "
Datus	8 "
Honey	6 "

Made into confection used in sleeplessness.

Madanakamavari—

Ganja in powder	5 parts.
Salep	8 "
Nutmeg in powder	3 "
Cardamom	1 "
Cloves	1 "
Saffron	1 "
Mastic	2 "
Almond	2 "
Horse radish—seeds of	2 "
Grapes	8 "
Tender cocoanut	140 "
Sugar	70 "

Made into lahyum.

Dose—From fifteen to thirty grains.

Uses—This is a very popular preparation, used as aphrodisiac in genital nervous debility.

Besides the above preparations made out of the drugs there are thrisulighronthum, majun, and kameer gaphra, of which majun is eaten by several people for the very sake of intoxication. The majun is also procurable in some sweetmeat bazars.

Sweets, such as plantains, sugar preparations, etc., are said to increase the intoxicating power of the drug, while decoction of pepper or dried ginger is believed to possess an antagonistic property against the narcotism of the drug.

41. I here speak of ganja-smoking.

(a) Yes, as digestive.

(b) Yes, as a refreshing agent.

(c) Yes, as febrifuge against malaria.

Muhammadans, fakirs, ascetics, gosains smoke ganja for the above purposes. I refer to the moderate habitual consumers in the effects I noted above.

43. Yes.

44. He feels slightly intoxicated or exhilarated in spirits and refreshed also. He finds his appetite for food increased. The effects last two hours at the most. No after-effects of any evil description are observed in habitual moderate ganja smoker, who of course feels uneasy for the want of the drug at his next usual time, though he can, with some difficulty, forego the consumption to a length of time.

45. Of habitual moderate ganja-smokers and habitual moderate bhang-drinkers.

(a) No.

(b) No.

(c) No.

(d) A kind of hoarse cough is found in ganja-smokers.

(e) It does not impair the moral sense, but produces laziness.

(f) Occasional excessive consumers—

Deadens the intellect, and also fits of insanity are common. It somewhat resembles *delirium tremens*. It is temporary. Yes, the symptoms may be re-induced by the use of the drug.

(g) Yes, considered. Never insanity, in my humble opinion, tends to indulgence in the use of the drugs.

46. Seldom are found instances of insanity in the habitual excessive consumers, whether of ganja-smoking or bhang-drinking; for they are habituated to the excessive quantity which, of course, is their daily dose. With these men there is great impossibility to forego the consumption. They are a lazy set of vagabonds, living at the expense of the public. They pose themselves as pilgrims spending their life in mukkams and muttums. They are found drowsy while sitting or walking under the influence of ganja-smoking. They are easily excitable.

47. No hereditary habit can be found. The children are not affected by the parents of moderate habits in the use of the drug.

48. It cannot be said that the children of the habitual excessive consumers will be taken to this hereditarily, but there seems every reason to say that their children will be constitutionally weak and excitable, having nervous temperament.

49. Yes, bhang-drinking, ganja-smoking or the special preparations of the drug are first used as aphrodisiac by young men in moderate quantities. I have not found instances of prostitutes using the drug for the purpose. The continued use, even if moderate, will bring on impotence in the end.

50. Excessive use never acts as an aphrodisiac.

51. No, moderate consumers are never connected with crime.

52. The excessive consumers (ganja-smokers and bhang-drinkers) also never commit crime; they are observed violent at times.

53. Not in general.

54. Never, as far as I know.

55. Never have I found such cases. However, I read instances of the kind as having occurred in Mysore territory. Yes, complete stupefaction can be induced by the drug.

56. (a) The effects, if moderately used, are at the first time in a newly practising man peculiar visions, he complains that he is taken to some height in the skies and made to fall therefrom; he will find many lights in one. If he begins to laugh he will be continuously laughing for a time. If he begins to do a thing he will be at it longer than usual, eat, drink or pass water for a longer time. Habitual moderate consumer on his usual dose feels refreshed and exhilarated, talks and sings, and feels healthy and happy. Eats his food with an increased appetite, and goes to sound sleep.

(b) If excessive, he is found at times violent or stupefied. If used in admixture with dhatura, he is violent, with tendency to commit crime. I know a case where the man was led to temporary homicidal frenzy.

57. Most of the ganja-smokers of moderate quantities are moral, god-fearing, affected in general with theomania, always far from being bad characters. I know also instances where men were found addicted to ganja-smoking or bhang-drinking being unable to procure alcoholic liquors on account of poverty. Some used the drug on the prescription of native medical physicians for gastrodynia and cancer of stomach.

58 to 61 and 63 to 70. I don't know.

Oral evidence.

1.—I am a Hospital Assistant. I got my certificate from the Madras College in 1879, and since then I have been working in the Northern Circars. I have had no experience in lunacy.

29.—I know a case of a man smoking dhatura with ganja. He was a sepoy for some time. He then became a peon in the Collector's Office. I never saw him take dhatura. He was under me for a time, and I know for a fact that he used ganja. My friends told me that he took dhatura. He once committed homicide under the influence of dhatura, and was convicted and punished for it. I do not personally know any other case of the mixture of dhatura with hemp. I don't know what part of the dhatura plant he used.

45.—I have here described the effects of occasional excessive use of the hemp drug. Habitual ganja smoking even to excess does not ordinarily lead to insanity. I have learnt this from other people, and my opinions are not based on personal observation. I have however seen both habitual excessive consumers as well as habitual moderate consumers, but I have not known any of them to go mad. The persons who go mad are those who are not yet habituated to the drug. In framing the opinion I had the example of tobacco in my mind, the occasional excessive consumers of which suffer a good deal, while habitual consumers do not.

48.—What I have written here is what I should guess to be the fact. It is not founded on observation.

117. *Evidence of Hospital Assistant D. RAJENDRUM, Calicut.**Oral evidence.*

1. I am Hospital Assistant of the first class with twenty-five years' service. I have been four years Resident Hospital Assistant in the Calicut Asylum and gave over charge on the 19th December 1893.

45. When a patient is received into the asylum, my procedure has been first to look into the warrant and papers with him and make entries in the General Register. If I find any omission in the certificate I write to the Magistrate who sent the man or to the Civil Surgeon (as the case may be) bringing it to his notice and asking him to furnish the required information. I mean such omissions as the "cause of insanity" or any other particular in Form C. This is in accordance with the Madras Surgeon General's Circular No. 12, dated 28th September 1891, which emphasises "the extreme importance of making every endeavour to obtain a full and correct history of each case with special reference to *cause* and *previous occupation*." In illustration of this, I put in the papers in the case of Neerati Moosan, in whose case the "cause" was not shown. I therefore wrote to the Civil Surgeon of Telicherry. He wrote to the Joint Magistrate requesting him "to ask the police to furnish information as to cause of insanity at an early date." The Joint Magistrate sent the papers to the Acting Inspector of Police. He reported "Sir, I humbly beg to state that Neerati Mayan, the uncle of the lunatic, and others state that religious study brought about the disorderly state of mind of the lunatic. I too find on inquiry the same to be correct." This was sent on to the Asylum Superintendent in original; and I duly entered "Religion" as the "cause."

I only apply in this way to the Civil Surgeon in reference to "cause." In all other matters I apply direct to the Magistrate who sent the lunatic.

When a lunatic is received, I immediately fill in all the entries in the "General Register" from the papers in my own hand. Column 10, which shows "cause," is at once filled up if there is any entry as regards cause in the papers. If the cause is shown as "unknown" in the papers, I enter the word "unknown" and make inquiry from the Civil Surgeon. But I would not do this if there were friends with the patient who could tell me the cause. If there are friends, I ask them what was the cause. If they give me a reasonably satisfactory cause, I enter it at once. I put them leading questions,—*e.g.* Has he suffered from disease? Does he smoke ganja? or take liquor? Has he suffered from grief?—and such questions. If ganja smoking were mentioned, I would inquire as to the extent and duration of the habit; but if no other cause were shown, I should enter ganja smoking without regard to the question of moderate or excessive use. After such an inquiry as I have indicated I make the entry myself without waiting for sanction; but I show it to the Superintendent for his approval. He comes as often as is necessary,

generally twice a week. I do not keep the friends for him to see; but I merely tell him what I have done. In such cases I do not write to the certifying Civil Surgeon about "cause." It is enough that I have got it from the friends.

I would similarly take the statement of the police escorting the man as to any fact ascertained by them from the man's friends when they took charge of the man.

I have been specially careful in thus inquiring into "cause," since the remark in paragraph 5 of the Government Resolution on the Lunatic Asylum Report for 1890 stigmatising this asylum as "the worst" in respect to the average of unknown causes. That resolution was issued in July 1891.

There is only one case shown in the register for 1892 as due to hemp drugs. That has been specially treated by the Indian Hemp Drugs Commission. There are six cases shown in the register for 1893 as due to hemp drugs.

In one of these (Bala Desa Singh, admitted 16th September 1893), the Magistrate's Form C has the entry for "cause" blank; but I entered "ganja smoking," because that is mentioned in the entry regarding "habits or disposition." It was solely on this. He had no friends. He is a wanderer. In the case of Ram Dass (admitted 24th October 1893) the entry in Form C is "probably from smoking ganja." I entered "ganja smoking" accordingly, because it was the only cause assigned. The Case Book has this entry on November 17th: "Asked for ganja. When a cigar was given he was satisfied." There were no friends with this man.

In the case of Narayan Nair (admitted 14th December 1893) the entry in Form C is "wandering life and use of ganja." I only entered "ganja smoking," because I do not think a wandering life would make a man insane.

These three cases were from other districts, the other three of the six 1893 cases were local Calicut cases.

In the case of Ukappan *alias* Krishan (admitted 29th May), Dr. Carruthers shows the cause in Form C as "abuse of drugs probably." I entered "ganja" after inquiry from his wife who came to visit him.

In the case of M. Andikuti (admitted 5th July 1893), Dr. Carruthers shows the case in Form C as "physical, probably induced by abuse of alcohol and drugs." I cannot remember why I entered "ganja." My first entry was "use of intoxicants." Below that I later on wrote "ganja." I think I must have heard that the man was more addicted to ganja than alcohol; but I do not remember.

In the only remaining case, Assistant Surgeon J. J. S. Pillay entered "ganja smoking" as the cause in Form C. He has left the district.

118. *Evidence of Hospital Assistant S. ARUNANANTHUM, Vizagapatam.*

Oral evidence.

I am Resident Hospital Assistant of the Lunatic Asylum at Vizagapatam. I have been in the service twelve years, and have been nearly two years in my present post. The procedure in this asylum is that when a lunatic is received I look through the papers and show the writer the Form C which contains the points that have to be entered in the columns of the General Register. The writer then fills in these columns, and I am responsible that the entries are correctly made. I look over the entries he has made. Indeed, since the beginning of 1893 I have made the entries in the register with my own hand. The Superintendent does not compare the register entries with the entries in Form C. I am responsible that this work is correctly done. If anything is found deficient, especially in regard to the occupation of the lunatic and the cause of insanity, I bring the matter to the notice of the Superintendent, so that he may write to the Magistrate for the information. This is in accordance with printed orders of the Surgeon-General. The Magistrate replies; and entry is made in the register accordingly. Whatever cause is shown in Form C, or afterwards communicated by the Magistrate in reply to our enquiry, is entered in column 11 of the General Register. If the Magistrate does not give and cannot ascertain the cause, but says it is unknown, an entry to that effect is made. I then keep the matter before me, and try, when friends come, or by examination of the lunatic when that is possible, to find out the cause, for Government is very anxious to have the cause

ascertained in all cases and makes notices of consult in the annual printed report when the cause is not ascertained in the majority of cases. Before entering a cause thus ascertained by me, I would tell the Superintendent. As a rule I also keep the friends for the Superintendent to see.

As a rule, we would never enter any cause without first writing to the Magistrate. But in the case of Thottaya, one of the admissions for 1893, the Superintendent has authorised my entering the cause as ganja smoking, because the patient himself says he is addicted to ganja. He does not say his insanity is due to ganja, but he cannot give any cause. He is not quite sane. He was not asked how much ganja he took. We could not await information from the Magistrate, as the annual report was being prepared.

In the case of Pasupuleti, admitted in 1892, the cause was entered as "ganja eating alva," without any further inquiry, because the entry of "moral" by the Civil Surgeon of Rajahmundry was clearly a misconception. He did not enter the particular kind of moral cause. I took the cause therefore from the entry under "Evidence of Insanity" in Form C. In this same Form C it is entered that it is unknown whether the insanity is hereditary or not. But the mother, who visited the patient in the year 1892, told me his grandfather was insane. I then entered this on the papers, and told the Superintendent. But I made no entry in the register, for I could not alter the entry already made there.

119. *Evidence of MIRZA DAVOOD BEG, Pensioned Hospital Assistant, Trichinopoly.*

3. It grows in Jawadi's hills, Salem district, spontaneously.

4. It is known by the name of ganja only in this district, and is applicable to the same plant.

5. Wild hemp generally grows in temperate climate, black soil, rainfall and elevated spots.

6. The ordinary growth of wild hemp is generally scattered.

7. There is no cultivation of hemp plant in this district.

8. There has been no increase or decrease of area for its cultivation in this part.

9. The seeds are scattered first in a cultivated land in groups, and then transplant them.

10. The persons who cultivate hemp are of the same classes as other agricultural cultivators.

11. Ganja is always obtained from cultivating the seeds of wild hemp.

12. Wild hemp is not cultivated anywhere this side for the production of ganja.

13. The cultivation of the hemp plant is not restricted at all in this district; even the people do not like to cultivate it without license, and I think hilly tracts will be preferable for such, as Puthay Ma'ay.

14. None of the products of the hemp plant is prepared in this district.

15. The three varieties of hemp, such as ganja, charas and bhang, with their definitions as given in Dr. Prain's report of 21st June 1893, are quite correct, and accepted in this district.

16. Yes, bhang is prepared by the people at their quarters from the dried product of the hemp, when it is required, and not at the place of growth. Ganja and charas are prepared only from the wild plant where it is produced.

17. Any class of hilly tribe who are accustomed to prepare it.

18. Ganja and charas can be kept up for a year, but not the bhang, which is to be consumed within two hours; exposure to open air loses its effect.

19. Ganja and charas used only for smoking, and the latter more in up-country than in this part, as it is not obtainable here.

20. Ganja is smoked by the debauched natives of this part, and charas by Chinese and Sikhs, being rather valuable.

21. Flat ganja only is used here, and sometimes chur or bruised powder.

22. Natives use charas prepared in North-West Provinces.

23. Bhang is used only for drinking purposes; it is like an infusion mixed with milk, sugar and some aromatics. Some of the Musalmans, Hindus and Rajputs of Madras, Vellore and Arcot, etc., use it in a limited manner.

24. The above-mentioned class of people, only

* This entry is, "His condition appeared to me at first mainly due to the abuse of ganja, an entire abstinence from which greatly improved his state and left him calm and coherent. At the close of the time of observation, however, he again became excited and noisy, this alternating with periods of sullen silence and others of foolishness. The disease is evidently recurrent."

to a certain extent, eat the bhang reduced into a soft pulp, or drink it in a liquid state like syrup.

25. As usual, the use of ganja is more than charas and bhang, as it is less expensive than the two.

26. Habitual moderate consumers of ganja if 10, the excessive consumers will be 15 or 20, and that of bhang very little in comparison to the above, as in 20 of the excessive consumers of ganja there will be two or three of bhang, being the expensive one.

27. Only the above debauched class of natives are addicted to these by the effect of bad society.

28. The average allowance and cost of ganja of each moderate consumer will be one tola or three pies, and that of the excessive consumer two tolas or six pies, and of the bhang require one anna four pies.

29. The different classes of consumers do not like to mix any ingredients with these drugs, and no one uses dhatura in this part. Bhang massala is not prepared or sold here.

30. Only one drug of ganja is consumed either in solitude or in company, not more than three annas weight a time, and is confined to the male sex; and it is not consumed by children.

31. The habit of consuming the said drug of ganja is easily formed by bad company, and it is difficult to break off, and there is every tendency to develop the moderate habit into the excessive one.

32. There is no such custom for using such drugs, or any religious order to this effect, and is likely to lead to the formation of the habit, and otherwise injuries.

33. The use of each of these three drugs generally contemptible by all, as it leads to negligence, idleness and irregularity, and the same is applicable to all narcotics. As for worshipping the hemp plant is not known.

34. Certainly it will be a serious matter of the consumers when they do not use it, as they are generally restless and not inclined to work; and the number of ganja consumers probably will amount to 200 and that of bhang 20.

35. The use of these drugs cannot be prohibited, and it may be used sometimes illicitly. I think its prohibition is a difficult matter, and it will produce great inconvenience among the consumers, and not likely to amount to a political danger, or to follow any alcoholic stimulants or any other drugs.

36. Alcohol cannot be substituted for any of these drugs.

37. The effects of charas smoking are far stronger than that of the ganja smoking, which is mild.

38. Among the three different preparations of ganja, the round one acts more powerfully than the other two.

39. The smoking of the three preparations of the hemp plant is less injurious than drinking or eating, as in the former a small quantity is consumed, whereas in eating or drinking a large quantity, and its effect is lasted upwards of three hours.

40. Native doctors use this drug in cases of old dysentery, and not for cattle.

41. The moderate use of ganja, bhang or charas will be beneficial only to consumers (a), it gives them a digestive power; (b), it alleviates fatigue; (c) it acts as a prophylactic measure for some time in malarious tract.

No one uses it for the above purposes, but the consumers. I refer to the moderate habitual use.

42. The moderate use of these drugs, though may not be beneficial, is quite harmless to them, as they are quite accustomed to it, and likely to increase the quantity.

43. Moderate consumers are quite inoffensive to their neighbours.

44. The immediate effects of these drugs when moderately used are to increase the pleasure and appetite for about three hours in bhang, and about half an hour in ganja, and no other uneasiness.

45. The habitual moderate use never produces any bad effects, such as impairing the constitution or loss of appetite, or causing any dysentery, bronchitis, asthma, or any impairment of the moral sense or immorality and insanity; and they confer generally its value than its injuries.

46. The habitual excessive use of these drugs stupefies the consumer, and he suffers the same as a man under the influence of alcohol, by rigidity of muscles, insensibility, etc., which lasts sometimes for several hours.

47. The habitual moderate use of these drugs is not a hereditary habit, and is not affecting to the children of moderate consumers.

48. The habitual excessive use of these drugs probably may be a hereditary one in a small degree in some only.

49. The moderate use of any of these drugs is not practised as an aphrodisiac at all, and is not used by prostitutes whatever, and the use of hemp never tends to produce impotence.

50. The same as above.

51. Bad characters, habitual moderate consumers are not in large proportion addicted to these drugs, and they have not any connection with crimes.

52. The excessive use of these drugs likely to bring some crimes of trifling nature.

53. The excessive use of these drugs is likely to incite some violence, and is not led to any temporary homicidal frenzy, as far as I know.

54. These drugs are not used by criminals to fortify themselves in committing any crimes, etc.

55. The criminals never use these drugs to further their designs, and stupefaction can be completed without any admixture.

56. The preparations of hemp are used only to act on the brain a little, and is not preferred to have any admixtures, and I am aware that they do not add dhatura for their use.

57. Ganja and charas—Of these the former only used for eating and smoking, and the latter only for one use.

58. I think the administration of hemp drug will work well on the hills, like Putchay Malay in this district, as we get weekly an immense amount of oranges, lemons and other roots.

59. As above.

60. I think the cultivation of ganja-bearing plants could be controlled well.

61. For the production of charas if hemp is cultivated, its process of preparation can be controlled well under the supervision of experienced people. As for yielding more charas, well-trained men should be appointed.

62. Hemp plant is not cultivated for bhang, as it is prepared from the dried drug at their quarters.

63. I have no objection for the system of wholesale vend, as for their preparations only ganja and charas are made, as a rule, and not the bhang, which is already mentioned in paragraph 16, chapter III.

64. I got no objection for the import, export and transport of these drugs.

65. I think the taxation of these drugs, alcoholic liquors and other intoxications is reasonable.

66. One rate of tax for different kinds of ganja will be sufficient.

67. The present system may be continued.

68. The houses and shops are licensed for the sale of these drugs everywhere.

69. Nothing has been consulted with any body for opening a shop except the convenience of the people.

70. No importation of hemp drugs whatever from Native States, and the duty is regularly paid on these drugs, and there is nothing untaxed drugs here.

N.B.— There are four preparations of hemp, (1) ganja, (2) charas, (3) bhang, and (4) majum, instead of three.

Majum, a compound of charas, butter, sugar, flour and milk, generally made in the form of small round or square cakes of light yellow colour, and is eaten like a sweetmeat all over India in a very limited manner, at one or two pies a time, once a day towards evening by some of the debauched men.

120. Evidence of P. S. MOOTOOSAMY MODELLIAR, Retired Native Surgeon, Tanjore.

1. I have had only a few opportunities of observing personally, the rest of my information being derived from persons who have been more fortunate and of whose reliability I have satisfied myself, and lastly from books, which I have quoted invariably, reference being given to the pages for verification.

2. Charas is not known here. Ganja is here applied to the whole hemp plant. People here speak of ganja plant, ganja leaves and ganja flowers. Bhang is here applied not to the leaves, but to an electuary where the leaf forms an important ingredient.

4. It is known as ganja only and refers to exactly same plant, *Cannabis sativa*.

7. Hemp is not cultivated in the Tanjore district. The ganja shopkeeper here says that he obtains his ware from Kalangambady hills (North Arcot district) and from Dharampuri (Salem district).

11. A few plants are raised from the seeds of wild ganja sold in bazars, but they do not possess the same property as the one under reference (*Cannabis sativa*).

12. Yes. In Dharampuri (in Salem district), Kalangambady (in North Arcot district), both hilly or mountainous places. The raising of the hemp plant except for medicinal purposes is restricted by the Government after the introduction of the license system. In plains its cultivation in any numbers cannot prove successful, the owners of single plants finding it very difficult to keep them alive.

14. The ganja shopkeeper here says that he obtains his ware from the Kalangambady hills (North Arcot district) and from Dharampuri (Salem district), and the cultivation and preparation there would appear to be on a somewhat large scale.

18. Ganja can be kept for two years with ordinary care.

Some preparations from bhang, as purnathi, majum, etc., can be kept only for six months.

20. In this town Muhammadans and Hindus of the lower classes smoke ganja. But the number is small compared with the population of the town, below 2 per cent.

21. In this town flat ganja is the only kind imported and used.

27. Muhammadans of the poorer classes, religious mendicants (Sudras), and the lazy and the indolent among the non-Brahmin Hindus of the poorer classes.

28. (a) Half a tola, costing two pies.

(b) One tola, costing four pies.

29. In smoking, ganja (the flower top) is not put into the pipe by itself. Ganja is freed of its seeds and sticks (pedicels), rubbed with a little water in the palm of the hand, and after the water has been squeezed out, placed in a tubular vessel called *silumbay*, along with bits of prepared tobacco, fire being placed above all.

In eating, the bhang or hemp leaf is not chewed by itself. The leaves are cleaned and washed in water seven times, soaked in milk one whole day, then the leaves may be thrown away. The milk is strained and boiled, the cream converted into butter, and then melted into ghee. To this ghee are added syrup, various seeds, roots and flowers, reduced to powder, and the whole stirred into proper consistency. While the goli or bhang (as it is termed here) sold in the ganja shop contains only a few roots, flowers, etc., those prepared in the house for private consumption have materials added to the number, they say, of even a hundred and more. This is known here as purnathi or bhang. This cannot be taken daily, being too intoxicating, but the bazar article, from not containing so many ingredients, may.

(b) The flowers of *stereospermum*, *suaveolens* (kamapoo or the flower of Kama or god of love) or *cycus circinalis* are added to make the preparation aphrodisiac. A few of the eaters simply fry the leaves in ghee, powder it nicely, mix it with palmyra jaggery and eat.

The drinking is an even more cumbrous process. 5 or 10 ozs. of hemp leaves freed of their stalks and seeds and washed several times in water, are put in 40 seers (Madras, of 24½ tolas) of milk, along with powdered almonds, cardamoms, cloves, nutmeg and mace, date fruits, currants, poppy seeds, rose-buds, sugar and plantain fruits fully ripe. After being boiled the leaves are removed. Then the mixture is strained and made to absorb freely the fumes of frankincense, put in an air-tight vessel some time before being drunk. The effect is overpowering, and the intoxication in many cases lasts for more than a day, and in some for three days even. Coconut milk is substituted for cow's milk where the latter is not available, and the intoxicating power of the liquid is augmented greatly thereby. The mixture can be kept only for a few days. The above is the recipe of Rajputs and Mahrattas here.

Majum is another preparation of the *cannabis*, the composition of which varies. The ingredients of the majum sold in the ganja shop here is composed of hemp leaves, palm jaggery, long pepper, black pepper, coriander, cummin seed, liquorice and ghee (in a small quantity).

Dr. Ainslie says that the flower of dhatuira and the powder of nux-vomica are used ; at any rate, not here. This is used by adults only.

Majum is sometimes given to children to put them to sleep, the composition being slightly different, the ingredients being Ashtagram sugar (very superior) 15 times the hemp leaf, nutmeg, and ginger. The dose is the size of a tamarind seed.

30. It is taken in solitude as well as in company. Here smoking may be said to be confined to the adults of the male sex.

31. Yes, by association with ganja consumers the habit is easily formed. But it is difficult and in most cases impossible to break it off. I know a case of a Muhammadan who, desiring to break off the habit of eating a bhang electuary known as purnathi and smoking ganja, took to drinking arrack, and finds to-day that in addition to the ganja habit which has not left him he has contracted the habit of drink too. There is a tendency in the case of the moderate habit to develop into excess.

33. Public opinion is strong against the consumption of the drug in either of the forms known here. Intoxicants are as a rule at a discount in the estimation of the Hindus ; and the bad effects it manifests in the habitual consumers is enough to account for the ill-esteem in which they (consumers) are held.

40. Ganja is valued both by vaidyans (Hindu physicians) and hakims. A preparation of it, called Vindadi, which is non-intoxicant and different from punathi (described elsewhere), is given in small grains as a tonic and astringent in cases of diarrhoea, a promoter of appetite, as an anodyne, and in dysmenorrhoea as an antispasmodic. A preparation from hemp seeds is made by hakims which is non-intoxicant and given as an aphrodisiac.

43. I find generally that while some moderate consumers of ganja are inoffensive, there are other instances where the consumers of ganja during the moments of intoxication are predisposed to quarrel. Pereira in his elements of *Materia Medica* (1850) says :—In Orientals the inebriation or delirium produced by it is usually of an agreeable or cheerful character.....It renders others excitable and quarrelsome and disposed to acts of violence (page 1240).

44. It does produce intoxication. It allays hunger in some ; and in some others it creates appetite. Its effect lasts from half an hour to an hour and more. The want of subsequent gratification does produce a longing which is a source of considerable uneasiness.

46. "The habitual use of *cannabis* in excessive doses causes the face to become bloated, the eyes injected, and the limbs weak and tremulous ; the mind grows imbecile, and ultimately death by marasmus is apt to occur." (Dymock's *Pharmacographia Indica*, Vol. III, page 329.) All these facts have been verified by me personally.

47. It does not appear likely.

49. A preparation of bhang known as purnathi is so used ; also majum (*vide* answer to question 29). Dr. Pereira also bears this out. The long continued use of hemp tends to produce impotence. Dr. Dymock's *Pharmacographia Indica* says :—"It does not increase, but on the contrary impairs the venereal propensity and power" (page 329, vol. III).

68. In this municipality there are three shops where ganja, bhang or purnathi and majum are sold, but they are not consumed on the premises. The shops here are working in accordance with their licenses and without any complaint.

121. Evidence of H. S. A. M. MUNJUMIAN, Native Medical Practitioner, Cuddapah.

2. I accept Dr. Prain's definitions of ganja, etc., for my district. In answering the several questions I have especially dealt with ganja, which is consumed to a great extent in this district. I think charas is not at all used here ; but bhang is sometimes consumed by the people. All the points connected with ganja have thus been more thoroughly dealt with than any other substance.

Ganja is locally known by the following names : (a) ganjyaku, (b) bhangyaku, (c) alwarpatrica, (d) ganaipatrica, etc.

3. Cuddapah district grows the hemp plant comparatively to a large extent.

7. The hemp plant is cultivated in this district chiefly for the production of ganja. It is cultivated in the following parts of the district, *viz.* :—

Sub-division :—Cuddapah, Royachoty taluk, in villages Veerabally, Vangimalla, Gadikota, Hasanpur, Guvalchervu, Sundopally.

Main Division :—Jammalamadugu, Pulivendala and Proddatur talukas.

Cuddapah taluka :—Comarunipally, Mithamidipally.

9. In the Telugu month of Jashtem the seeds are sown in dry land ; after some days the small plants grown are taken off and planted all over the fields ; when the plants attain, say, a height of 3 feet or

so, the big leaves are cut down from the trees. The trunks are then twisted a little and the trees manured. After the lapse of some days, the bud and flowers (reddish in colour) are harvested along with twigs or small boughs of the trees.

10. The cultivators of hemp are of the same class as other agricultural cultivators.

11. They are not raised from the wild hemp. The seeds of the cultivated hemp only are used to raise plants for the production of ganja.

14. Ganja is prepared in this district, in those parts where the trees are cultivated (referred to in answer to question 7). It is prepared to a moderate extent.

15. I stated in my answer to question (9) under the method of cultivation that flowers with small boughs are cut down from the trees and tied into bundles. As to the preparation of ganja, I have to say that these bundles are dried a little in the heat of the sun. The bundles are then placed one over the other, tied in a mat, and a big weight placed over it. After the lapse of a short period the bundles are separated from each other and kept exposed to the dew during the night ; at day-break, the small bundles are again tied up into a big one, and the weight placed over the mat covering as above stated. This practice is continued so long as a gummy quality is created in the flowers and buds. Subsequently the bundles are completely dried in the heat of the sun and then sold.

17. Preparation of ganja from the hemp drug is made by Capus, Hindus, Muhammadans, Pariahs, Chuklers and others.

19. Ganja is used for smoking. There are also several uses of it in medicine and for medicinal purposes.

20. Ganja is smoked by sanyasis or bairagis and fakirs or dervishes (almost without exception). A very few non-fakirs among Muhammadans and some Hindus, Rajputs, Mahrattas, Malas, etc., also smoke ganja; sanyasis smoke in matts and fakirs in makans and wherever they happen to be. Others smoke in their own houses.

21. Flat, round and chur ganja are considered equally preferable for smoking.

24. Only a very small proportion of the people eat or drink bhang.

25. The use of ganja is neither on the increase nor on the decrease.

26. Nearly 70 per cent. of the whole number of ganja consumers are habitual moderate consumers. Twenty per cent. may be habitual excessive consumers. Five per cent. occasional moderate consumers, and five per cent. occasional excessive consumers.

27. Habitual moderate consumers and habitual excessive consumers are mainly sanyasis and fakirs. The other classes of consumers are taken from the common people who occasionally associating with habitual consumers are induced to smoke or voluntarily smoke ganja.

28. Ganja smoking costs the habitual moderate consumer approximately one anna, and the habitual excessive consumer two annas or so per diem.

29. Tobacco is ordinarily mixed with ganja by that class of consumers which wishes to increase the intoxication of the drug. I do not know if dhatura is so used. I know the preparation "bhang massala," which is sold for the purpose of being mixed with ganja. Its ingredients are: (1) aniseeds, (2) poppy seeds, (3) melon seeds, (4) dry ginger, (5) cow's milk, (6) milk taken from the cocoanut kernel, (7) sugar. Bhang massala is used on account of its good taste, strengthening power, and the quality of improving the appetite.

30. Consumption of ganja is generally practised in company and by a very few people in solitude. In this district it is mainly confined to the male sex. I have not seen children smoke ganja.

31. The habit of consuming ganja is easily formed. It is not very difficult to break the habit off. The moderate habit may develop into the excessive, but it is not a necessary tendency of the drug.

33. The consumption of ganja is regarded a mean practice. With fakirs and sanyasis the practice is not at all thought of. It may be said that there is a social public opinion on the practice, but none religious. The hemp plant is never worshipped by any sect of the people here.

35. It would not be feasible to prohibit the use of ganja or bhang, especially the former. I can devise no means or suggest any measures for enforcing the prohibition of the use. The prohibition would occasion serious discontent among the consumers. In my opinion such discontent may probably amount to a political danger.

The prohibition, if at all carried out, would never be followed by recourse to alcoholic stimulants. I have some reasons to assign for saying that the prohibition would occasion serious

discontent which may develop into a political danger. They are—

- (a) Thousands of sanyasis or bairagis and hundreds of fakirs or dervishes are habitual consumers of ganja. Generally there are chiefs or heads over bands of sanyasis and fakirs (which bands consist of a thousand persons each, and sometimes a hundred men each, and so on). When the prohibition is enforced, these heads will most probably become discontented, and consequently the thousands under them would also be discontented.
- (b) These sanyasis or dervishes are always content, only if they have the usual supply of ganja for smoking. As for meals and other requirements, they do not care much.
- (c) Several of them are engaged in their remembrance of God, and the smoking of ganja is only a means to give them patience to be engaged in such devotion, without food or water for hours and days. They do not wish to interfere in matters of government or any other person's matter. In short, they are satisfied with any ruler, with any form of government, and with anything which falls to their lot.
- (d) When ganja smoking is prohibited and the prohibition enforced, I have no doubt that they (the consumers) would rise against Government, though they may not be able to do any real injury to the Government. Common people who smoke ganja may also side the sanyasis and fakirs then.
- (e) They smoke ganja, care very little for food or clothes, and are engaged in praying to God, and praying for the good of the reigning monarch; whoever may be the ruler, they are satisfied with him and pray for his welfare and prosperity, and never say anything bad of him.
- (f) Moreover, during my experience of twelve years as Honorary Magistrate of Cuddapah town, I have not known of any case of murder or homicide committed under the influence of ganja, whereas other intoxications prompt the persons under their influence to commit more serious offences.
- (g) No Muhammadan Emperors of India, however strict in matters of intoxication (according to law), nor any Maharajas and Hindu rulers, etc., seem to have, at any time, attempted to prohibit the practice or taken notice of the matter (though there was no duty in those days on ganja). The reason seems to have been only that discontent would be created among the consumers and that the discontent would lead to a political danger which they did not like. Nor did those kings ever wish to disturb poor and innocent people, that is, sanyasis and bairagis or fakirs, who are always engaged in remembering God, by such prohibition.

36. There is no reason to think that alcohol is now being to a certain extent substituted for any of these drugs.

38. The three different preparations of ganja have the same effects in kind or degree on consumers.

40. Native Doctors sometimes prescribe the use of ganja on account of its medicinal qualities along with other medicinal substances. Spleen and liver diseases are generally treated with the use of ganja. The abdomen sometimes becomes enlarged and ganja is used. I do not know if any of the drugs is used in the treatment of cattle disease.

41. The moderate use of ganja or bhang is beneficial in its effects, (a) as a food accessory or digestive, (b) as giving staying-power under severe exertion or exposure, or to alleviate fatigue, (c) as a preventive of disease in malarious and unhealthy tracts. Several native sepoys who are tossed about from one place to another use ganja for smoking to prevent fevers, etc. A small minority of the people consume bhang or ganja for digestion of food. On several occasions I have prescribed the use of ganja as a means of digesting food and with other medicines preventing malarious fevers, asthma, abdominal irregularities of some kind.

43. They are inoffensive and very polite and homely with their neighbours, enjoying good chat, etc.

44. The immediate effect of the moderate use of ganja on habitual consumers is refreshing provided the consumer also takes good meals. It does produce intoxication which appears to be a very pleasing one. It does not allay hunger. It creates appetite. The effect lasts for nearly 30 minutes or so. To the moderate consumer the want of subsequent gratification does not produce much longing or uneasiness.

45. The habitual moderate use of ganja or bhang does not produce any noxious effects, physical, mental or moral. It does not much impair the constitution, provided the moderate consumer also takes moderately good meals, or if the habitual moderate consumer does not indulge in sexual intercourse much, or if he does not marry at all or does not give himself up to debauchery, etc. This is the case with sanyasis and fakirs. It does not cause dysentery, bronchitis or asthma. On the other hand, ganja smoking is beneficial to asthma. Native doctors prescribe ganja with other medicines for preventing asthma, neuralgia, coughs, etc. Moral sense is not impaired, and debauchery is not induced by the moderate use. It causes laziness for a time, as is the case with other intoxications. It does not deaden the intellect, nor does it produce insanity. In short, the moderate use of ganja is not harmful in any way to the consumer.

46. The excessive use of ganja brings on all or some of the noxious effects pointed out in question 45. It may impair the constitution, cause dysentery, etc., and also deaden the intellect or produce insanity.

47. The habitual moderate use of ganja or

bhang does not appear to be a hereditary habit, nor does it affect the children of the moderate consumer in the majority of the cases. In very rare cases it may affect the children. (Here it depends on the degree of pleasure the consumer takes and his disposition as to its acceptance.)

48. The habitual excessive use of ganja may affect the children of the excessive consumer in several cases. Questions No. 47 and No. 48 are answered from my natural experience of medicine, which teaches me that at the time of a man's sexual intercourse the high pitch of disposition which he then possesses on account of any intoxication, or pleasurable luxury which he indulges in, may probably affect the issue. But that it is a hereditary habit is not my strong opinion.

This acceptance or non-acceptance of the pleasurable sensation introduced into a man by the consumption of any of the said drugs depends entirely on temper and disposition of the consumers, which disposition is bestowed by God or nature with great power of acceptance in some, and that of resistance in others.

49. The moderate use of any of the drugs, especially ganja, is sometimes practised as an aphrodisiac. It does increase the potent power of a man if used in admixture with other medicines which doctors may prescribe. But ganja by itself is not a substance which would remove impotency or increase the potency of a man. I do not know if it is ever used by prostitutes.

50. Excessive use of hemp without the admixture of other medicines may in course of time tend to produce impotence.

51. No large proportion of bad characters are moderate consumers of ganja or bhang. On the contrary, the moderate consumers are always poor and quiet people. It has no connection with crime in general or with crime of any special character. I have not known of any such connection between moderate use and crime during my twelve years' experience as an Honorary Magistrate, Cuddapah.

52. The excessive consumers of ganja, who may be calculated at only 20 per cent. and less of the whole number of consumers, may very occasionally commit some crime. But I had no opportunity to know of such cases.

53. I have not known of cases in which excessive indulgence in any of the drugs incited to unpremeditated crime.

58. There was no excise formerly in respect of the hemp drug. The modern system works well. But the duty on ganja is considered to be heavy.

67. Having regard to the ultimate incidence of the tax on the consumer of ganja, I object to the present taxation. I recommend a decrease in taxing.

122. Evidence* of SAIYID MAHMUD *alias* HAKBEM NHANNAY MIAN, *Medical Practitioner, Cuddapah.*

1. I have obtained a knowledge of the Indian hemp plant from the following sources:—

(1) I have acquired a knowledge of the hemp plant from my late own paternal uncle Janab Moulavi Mian Saiyad Shah Mahmud Sahib *alias* Hazrath Hakim Shah Sahib, Mian Sahib, who had a thorough knowledge of the science of medicine and whose eminent qualities are widely known to public.

(2) I have acquired a knowledge of the hemp plant from my own experience.

(3) I have obtained a knowledge of the plant from bhang consumers of the town of Cuddapah and several other bhang consumers of different classes.

(4) I have obtained a knowledge of the hemp plant which is cultivated in the Kumavarpalli Qasba of the Cuddapah taluka from the statements made by several hundred cultivators of the drug and from personally inspecting the plant itself.

(5) I have obtained a knowledge of it in (1) Cuddapah, (2) Hyderabad, (3) Agra, (4) Delhi, (5) Bans Bareilly, (6) Philibhit, (7) Badaon, (8) Muradabad, (9) Rampur, (10) Lucknow, (11) Ankola, (12) Madras, (13) Tinnevely, (14) Panagudi, (15) Nandial and (16) Banganapalli, which have been visited by me.

2. The answer to the question as to whether ganja, bhang and charas are cultivated or do they

* Translation.

grow spontaneously and are they produced from the female plant is, that the male plant of ganja is not used at all. All the male trees are uprooted and thrown away in the fourth month after seeds have been sown. If seeds are sown in a field measuring one acre, then it is usually the case that only half an acre of the field produces the male plants, and half an acre the female plants. The distinction between a male and female plant is this, i.e., the male plants bear no buds and a peculiar kind of flowers blossom in the fourth month after the plantation, and that a white substance resembling flour comes out of a male plant if shaken. I have witnessed this myself by shaking it. But before the period of four months no distinction could be made. If the male tree is not rooted out, the female plant owing to its proximity with the male assumes a similar condition and consequently it is also uprooted. The bud of the plant is called ganja. The capsules and leaves which fall down from the plant are called bhang. The resinous exudation of the hemp plant collected during the dew season is called charas. The buds of the hemp plant are of three shapes, viz., (1) circular, (2) twisted, and (3) flat. Ganja is known by different names, such as (1) dagoparr, (2) bhusamparr, (3) shamsabadi, (4) mulki, (5) javaji and (6) almori. The hemp plant cultivated in the Cuddapah taluka is called mulki or country ganja, and it is circular in shape, and the other above-named ganjas were imported into Cuddapah from the neighbouring districts, but now according to the present ruling none can import it except the contractor.

3. Ganja is extensively cultivated in different parts of Cuddapah and Kurnul districts.

7. Ganja is cultivated in Cuddapah. Ganja is cultivated. Bhang is grown. It has seeds.

Ganja has been cultivated in *qasba* of Kumarpalli to an extent of about 200 checks, a check being equivalent to two maunds.

8. Formerly 1,200 checks of ganja were cultivated in the *qasba* of Kumarpalli of the Cuddapah taluka, which is situated at a distance of 10 miles from the town, but this year the outturn of the plant will approach to nearly 200 checks, a check being equivalent to two maunds. In these days ganja is much less cultivated than formerly, for the reason that Government has prohibited the purchase and sale of ganja by any person excepting the contractor, and consequently no person could purchase the hemp openly from the cultivator, nor could any cultivator sell it. Last year the contractor at this place purchased ganja at the rate of Rs. 5 per check from the cultivators, and sold it at his own price to its consumers. During this week I have been to the contractor's shop with a view to examine his dealings personally, when I found that flat ganja mixed with stalks which is known as javaji ganja or almori ganja was being sold at the rate of 24 tolas, i.e., a seer for rupee, and flat ganja without stalks was being sold at one anna for every half anna weight, which is a little more than a rupee's weight. The consumers of bhang bitterly complain about flat ganja for the reason that it causes dysentery and cough, etc., and does injury in different ways. The circular country ganja is better liked than the other kind of ganjas by the ganja consumers in Cuddapah and other places. They assert that the country ganja of Kumarpalli, etc., does not produce much heat and does less injury. It should now be noticed that the contractor purchases the plant at a very low rate and sells it at an exorbitant price. If the cultivators do not sell the ganja to the contractor at the price offered by him and take every

precaution to preserve it carefully, a change takes place after a year in its colour and intoxicating effect, which decreases its value. A rupee's worth of ganja will have to be given to the contractor only for 4 or 5 annas. Therefore it is my conviction that gradually raiyats will give up the cultivation of ganja which is attended with much trouble and loss of money and honour, and will have recourse to other cultivation which is more useful and beneficial to them.

10. The cultivators of hemp carry on other cultivations also, and they do not form a special class of raiyats.

11. In this country wild ganja seeds are not sown as a practice, but if any person wishes to do so, he may.

13. The cultivators may, if they desire, plant gardens of ganja anywhere (but not as wet and dry cultivation).

14. Ganja is cultivated in the suburbs of our town. Ganja is grown. Charas is not produced. Bhang is produced.

16. Ganja, charas, bhang could be obtained from a naturally-grown-up tree either in a populated place or in a desert.

17. It is prepared by peasants, of whatever caste they may be.

18. Both ganja and bhang become damaged if preserved for a long time, i.e., their shape undergoes a change and their intoxicating power is diminished and taste is lost. They may, with difficulty, be preserved in a good condition for one year by being exposed to the heat of the sun and open air.

19. The use of ganja is not restricted to smoking purposes only. It is used in two different ways: (1) It is smoked; (2) it is taken as a dietetic article. Ganja is smoked in different ways, viz. :—

(1) The first mode of smoking ganja is called sukka, which is prepared as follows:—A certain quantity of strong tobacco, after being mixed with four times as much quantity of washed ganja, is kept in a pipe or chillum and smoked. The residents of Cuddapah are generally accustomed to this sort of smoking.

(2) The second mode of smoking ganja is also called sukka, which is prepared thus:—From (unwashed) ganja, seeds, etc. are removed, and strong tobacco of an equal quantity is mixed with it, and then it is kept in a chillum and smoked. This is rarely done here, but bairagis from Northern India are much accustomed to this mode of smoking.

(3) The third mode of smoking is called has-tambole, and is as follows:— $\frac{1}{4}$ th tola of washed ganja, nutmegs of about two pulse weight, mace of two chanas (chick pea) weight, two cloves, two cardamoms, $\frac{1}{4}$ th piece of areca nut, four capsules of betel-leaf, aloes, two gumchis weight. All these are half bruised excepting ganja, and afterwards mixed with ganja, and smoked either in a hukka or a chillum. But this sort of smoking is scarcely practised here.

From ganja different preparations are made and used. (Regard should be had to the fact that wherever the word ganja occurs in this definition, it should be taken to mean purified ganja.)

(1) The first preparation is called sabzi, otherwise called bhang massala or simply bhang. This is prepared from the admixture of certain ingredients (i.e., $2\frac{1}{2}$ dirhams of ganja, 1 dirham of

pepper, $1\frac{1}{2}$ dirham of dry ginger, one tola of aniseed, $1\frac{1}{2}$ tolas of the kernel of musk-melon seeds, $1\frac{1}{2}$ tola of white poppy seeds, one tola of sweet basil seeds, 3 dirhams of almond's kernel, $\frac{1}{2}$ a tola of rose buds, milk measuring half a seer, and such a quantity of jaggery, sugar or sugarcandy is mixed with them as would suit taste. Some persons put two tolas of washed bhang instead of $2\frac{1}{2}$ dirhams of ganja.)

(2) The second preparation is called lurgi. It is composed of certain ingredients (*viz.*, ganja one tola, three tolas of coriander plant, one tola of garlic, one tola of common salt, curd measuring about one seer). All these ingredients are seasoned with little ghee and clove.

(3) The third preparation is called boja. This is prepared from the admixture of certain ingredients (*i.e.*, a handful of ganja, wet or dry roots of paddy, wet or dry roots of maize, dry or wet roots of bhui durleys—a sort of wild earth fruit, and madan kamachi—a sort of medicinal plant, maize scraps measuring about 1 seer, and such a quantity of canji—a mixture of rice water and the water with which rice is washed—as would suffice to boil the above ingredients well.

(4) The fourth preparation is called dullian or lumps of bhang (which is prepared by cooking mutton mixed with ganja and curry-stuff, etc., and eaten as usual).

(5) The fifth preparation is called majum and halvai (*i.e.*, ganja is mixed with sweetmeats and confections and used).

(6) The sixth preparation is ganja-ghee. It is prepared by mixing a certain quantity of ganja with milk, which is afterwards boiled and coagulated and turned into butter, then converted into ghee, which is used by being mixed with anything.

(7) The seventh mode of preparation is as follows:—A certain quantity of washed ganja or bhang is, after being ground, made into a ball of the size of a small lime and then used with or without jaggery.

20. Persons of various classes indulge in the use of ganja (in all its forms, *i.e.*, by drinking, eating and smoking) in various places. Persons use it publicly in bhangar khanas (*i.e.*, bhang houses) and privately in their own places. There are about 1,500 persons in the town of Cuddapah who use ganja.

21. If native ganja of circular size is procurable, people use the same; if not, they necessarily use the other kinds of ganja which may be sold to them by the contractor, whether flat, round or twisted, as described in answer to the second question.

25. Many people smoke ganja, but only a very limited number of people use bhang (sabzi).

26. The ganja smokers of the town of Cuddapah smoke ganja as well as bhang in time. The habitual intemperate ganja smokers number about 800.

27. Gamblers, thieves, licentious persons, beggars, independent men and servants, whose income is Rs. 10 or below, make use of hemp drugs.

28. About Rs. 12 worth of ganja and bhang is sold here daily.

29. The mixture of various ingredients with ganja and bhang gives different tastes and produces various sorts of intoxication.

The remaining answers are contained in the answer to question 19, which forms part of chapter V.

30. Ganja and bhang is used publicly in common bhangar khanas and as well as privately in one's own place. The exact number of consumers has not as yet been ascertained. Persons of all ages commencing from 11 or 12 years use ganja and bhang in this place.

31. A person easily gets into the habit of using ganja by being in the society of ganja consumers. If a person of intemperate habits gives up smoking all on a sudden, his life will not be endangered, but it will cause him a little trouble. I had, by way of trial, persuaded some three men, *viz.*, Khoja Bhoy Subbaya, a potter, and Nabi Sahib, who were intemperate consumers of ganja, etc., to give up their habit, which they did. In a few days afterwards they grew very fat. One of these three men, *viz.*, Nabi Sahib, is still surviving, but the other two persons died. The inhabitants of their quarter (of the town) are well acquainted with the abovementioned circumstances. In short, when it is possible for intemperate consumers to give up their habit of smoking, persons who are less accustomed to it would possibly give it up easily.

32. It is the unanimous and firm belief of all the Muhammadans that everything which causes intoxication is unlawful. We should now ascertain what opinion do the Hindus hold on this subject. In every nation the views of the persons of lower order is not admitted as a proof; while such is the case, we should try to obtain the views of noble and trustworthy persons. On several occasions I have heard Brahmins, Deputy Collectors and Tahsildars, etc., who happened to come under my treatment, making the following remark to their inferiors whenever they talked anything unreasonable—"what sort of bhang words are these?" From this it is evident that this sort of intoxication is looked upon as obnoxious by all and has consequently become a proverb. Ganja is moreover injurious.

33. Although the Puli Puja is performed, but it is not a special one, as it is performed in honour of other sorts of cultivations also.

Other answers are contained in answers to questions 31 and 32.

34. The answer to this question is contained in answers to question 31.

35. O cherisher of the poor, that it is an unquestionable fact that ganja, bhang and charas are poisons, and this fact is admitted by all. In my opinion their suppression would be an act of virtue deserving of future reward, but it is not advisable to suppress their use at once. Its suppression should be regulated under certain rules without any loss to the State.

(1) In order to put a stop to the cultivation of ganja gradually, more check and control should be maintained over its cultivators, in order that the desired object may be attained.

(2) A notice should be issued to the effect that a person who is in the habit of consuming ganja, charas or bhang should produce a certificate from a Government doctor permitting him to purchase any one of the above drugs for his daily use, the quantity being mentioned therein.

(3) If any consumer requires a certificate to use 3 tolas of any such drug, then the Government

Medical Officer should explain to him the several evil results that emanate from its use, and if possible give him sound advice, and thus by degrees reduce the quantity, so that he may wholly give up his habit. It is hoped that by the adoption of such measures, beginners who make use of ganja privately and who are not void of shame would voluntarily give up their habit.

(4) No contractor should be permitted to supply any person with ganja, charas or bhang who does not produce such a certificate from a Government Medical Officer. But these drugs (ganja, bhang and charas) may be sold to native Medical practitioners without the certificate.

(5) Severe control should be exercised over the contractor in order that he may not sell the above drugs surreptitiously.

To the best of my knowledge and researches, I am of opinion that alcohol, etc., cannot be safely used as a substitute for ganja, charas or bhang.

Answers connected with Chapter VI. Charas.—When charas, mixed with about a pulse weight of gudaku or tobacco, is smoked, it immediately causes intoxication which lasts for two hours. Its intoxication dries up the system and produces heat.

Ganja—When ganja mixed with tobacco is smoked, it causes intoxication within a minute which lasts for half an hour. Dryness and heat result from this kind of intoxication also. The second mode of smoking ganja, as described in answers to question No. 19, produces heat and dryness as well as intoxication. The third mode of smoking ganja, which is called hastambole, as described in answer to question No. 19, causes intoxication and mirth which lasts only for half an hour. Dryness and heat result from this also.

Ganja or Bhang.—The sabzi made from ganja or bhang is a combination of several ingredients (mentioned in answer to question No. 19), and when used, it causes intoxication, makes the tongue dry and increases appetite. Habitual consumers remain under its influence for six pahar. (A pahar is equal to a fourth part of the natural day or night). But a beginner remains senseless for two or three days according to the nature of his constitution, if neglected. Heat and dryness in a more or less degree result from it.

The second mode of preparation which is called largi is described in answer to question No. 19. The influence of its intoxication, etc., approaches to that of sabzi.

The third mode of preparation, which is called boja, is mentioned in answer to question No. 19. It produces an intoxication within an hour after its use and lasts for about six pahar. In all respects it is equal to sabzi and largi, but the tongue in this case never becomes dry but remains wet.

The fourth, fifth and the sixth preparations, as mentioned in answer to question No. 19, is more or less productive of the same results as those of boja.

The seventh preparation as described in answer to question No. 19 produces less heat and dryness as compared with that of ganja.

37. Please refer to chapter VI for the answer to question No. 37.

38. The round country ganja causes heat and dryness. The round and twisted ganja imported from the neighbouring districts produces more dry-

ness and heat comparatively to the country ganja. Of all the other ganjas, the flat ganja, otherwise called as javaji ganja or almora ganja, causes more cough, dryness and heat, and affects so seriously that blood comes out from nose and breast of some persons.

39. Answer to question No. 39 is contained in chapter VI.

40. I myself (Syed Muhammad *alias* Hakim Nhamay Mian) advised a patient to use ganja daily as a medicine. This person is still alive and has thoroughly become accustomed to its use and derives benefit thereby.

41. Ganja, bhang, charas, the seed and fresh leaves, etc., of the ganja plant are, no doubt, according to the opinion of medical experts, very useful for medicinal purposes. Its description is too long to be mentioned. The evils and advantages resulting from the use of these drugs are described at length in Mukhzan-ul-Advia (Materia Medica), a Persian book which was compiled 126 years ago, and in various other medical works compiled by eminent Grecian doctors and philosophers, and which may be referred.

44. Advantages are derived for a few days, but when a person becomes accustomed to it (ganja), he meets with several disadvantages.

45. A beginner at first seldom makes use of ganja, etc., for a few days. After a short period he begins to smoke moderately, but further on he commences to consume it inordinately; in the case of ganja, persons seldom adhere to moderation. Dysentery, asthma and various other diseases, such as drowsiness and weakness of body, etc., result from the use of ganja. I have seen three persons of whom one was a Hindu Marwari and the other two were Muhammadans become mad by its use. The madness of the Marwari was stationary, but of those two Muhammadans was not so. The use of ganja in the beginning gives rise to immoral habits also.

49. The prostitutes of this place make use of ganja and bhang. The remaining answers have already been given.

60. If Government desires to improve the condition of the ganja cultivators, it should introduce the following rules:—

- (1) The binding rules, which are in force respecting the ganja cultivators, may be relaxed in their favour (by referring to answer to question 8 it will be known as to what extent these rules, are binding), and they should be allowed to cultivate ganja as formerly and to sell it to the contractor alone at a price to be fixed by the panchayat.
- (2) The contractor should be compelled to purchase ganja at a fixed price from the cultivators of the taluka to which he belongs, and after their stock has been exhausted, he may be permitted to purchase the above article at a price which may seem reasonable to him.
- (3) The price should be fixed at such a rate as would be advantageous both to the cultivator and the contractor.
- (4) That for the purpose of rule (3) Government should appoint two persons who cultivate ganja extensively, two respectable merchants and an officer with full powers to fix the price of the ganja.

Oral evidence.

1. I was not educated in any Government College, nor have I taken any English degree in medicine. I have been practising for 20 years.

3. I have seen the hemp plant cultivated in the Cuddapah district. It was in the *kastu* of Kamavarpalli. The fields probably amounted to 10 acres. There were three or four fields. This village is 10 miles from Cuddapah, and I specially went to inspect the fields after getting the Commission's questions. A month or two before getting the Commission's questions, I saw two or three fields of hemp on the way from Cuddapah to Vehempalli. They were in the lands of Vehempalli. I cannot say what the area was. There appeared not to be more there than in Kamavarpalli. I have not seen the crop in Kurnool, but I have heard that it exists, and feel sure that the information was correct.

32. Muhammadans do consume the hemp drug although it is contrary to precepts of their religion. I have no doubt the drug is distributed at places where fakirs meet, because some fakirs consume the drug in defiance of their religion. It is impossible that a *mowlvie* should distribute the drug. All intoxicants are forbidden in the Koran, though hemp is not specially mentioned.

45. Insanity only results from the excessive use of the drug. I know the Hindu I have mentioned was an habitual excessive smoker of ganja. The Muhammadans were also habitual excessive consumers, sometimes smoking and sometimes drinking the drug. I don't know if the Hindu was sent to an asylum or not. I saw him in Hydera-

bad. He was attended by S. T. Window, a European medical man who was formerly master in the medical school. I did not attend him, nor was he under my observation. The hospital is next door to my brother's house where I was living, and I saw the Hindu there from time to time during a month. I have no doubt it was a ganja case from the information given me by the dresser and compounders of the hospital. One of the Muhammadans I saw in Hyderabad, the other in Cuddapah. The Hyderabad man, named Amir Ali, was living in the same street as myself. I did not treat him. The people who consorted with him said that he was a ganja smoker. Of course I did not see him taking ganja, but I saw him when he was mad. I did not treat the Cuddapah man. He was a disciple of some members of my family. I heard from his relations that he had the ganja habit, and I have seen him smoking ganja. He would remain insane for periods of 10 to 30 days, and then get better; but in the intervals he was never in full possession of his senses. He has been in this state for the last 12 years. I can't say how many of these attacks he has had. He did not drink liquor; he could not afford it. None of his family was insane. I know them all. I heard that before he became mad he used to indulge in sexual excess. He has never been violent, or he would have been sent to an asylum. He has all the marks of insanity, except that he is not violent. He still takes ganja. I frequently see him as I go about visiting my patients. I have conversed with him and his father frequently. His age is about 35 or 36. He is continuously idiotic; but he is not always in a complete state of insanity.

123. *Evidence* of SINGITAPU VENKATA RAO, Brahmin, Madahwa, Native Physician and Inamdar, Coconada, Godavari District.*

1. The information I now give of the properties, etc., of ganja, etc., has been got from Sastras (medical books).

3. I do not know of any district in which ganja grows spontaneously. It is grown abundantly in Daggupadu in the Kistna district. I do not know in what other districts it is grown abundantly.

14. Ganja is not prepared by any one, and bhang is prepared. It is not prepared by any one particular individual in any particular locality. It is prepared by every one who desires to excite or stimulate pleasure.

16. Bhang can be prepared generally by people in their houses. The ganja plant grown on red soil or in wild tracts is used for preparing bhang; but the plant grown on loose soil is not useful for the purpose. Charas is unknown in this country. It is believed to be grown in cold countries. The hemp plant grown on hard soil is used for preparing both ganja and charas.

19. Ganja and charas are used not only for smoking, but they are mixed in medicines like other drugs. Diseases arising from phlegm and vatam (cold) and hard breathing, etc., are cured. It strengthens the nerves and gives appetite. It is used in medicines in all countries. If the juice of the ganja leaves be rubbed on the eyelids, eye diseases are cured. Piles are also cured by this.

20. All classes of people smoke ganja. The proportion of the ganja-smoking population is 16 to 1. Charas is unknown here. It is extensively used in cold climates,

24. All classes of people drink bhang rarely for the purpose of exciting pleasure; but is not extensively used. It appears that three or four in every thousand people drink it. The people of the northern countries use it.

25. The use of ganja and bhang is on the decrease since their price has risen.

28. The average cost per diem of these drugs for one man is from one to three pies.

32. The use of this is not prohibited by social or religious customs.

33. The consumption of ganja, etc., is not looked down upon, as it does not produce as much intoxication as arrack, and make a man senseless; nor is its consumption prohibited. The ganja plant is not worshipped in this country.

39. Ganja is not either drunk or eaten here, but only smoked. So I cannot say whether smoking is a less injurious form of its consumption than drinking.

40. In medical books it is said that these drugs may be used as medicines. A treatise called Gunapatam treats of its properties. I do not know whether this is used for cattle diseases or not.

41. The moderate use of ganja is beneficial inasmuch as it cures diseases.

43. Moderate consumers are not offensive to their neighbours.

44. The moderate use of ganja cures dyspepsia and diseases arising from phlegm and vatam (cold). It is refreshing. It creates appetite, and if eaten when hungry, it allays hunger and fatigue.

* Translation.

produces very little intoxication, but it does not make a man senseless. The effect lasts for one jam or three hours. It produces thoughts and makes the mind steady; want of subsequent gratification produces longing as well as a little uneasiness.

45. The moderate use of this does not produce noxious effects, physical, mental or moral.

49. This is used mixed with other articles as an aphrodisiac.

51. Bad characters are not habitual consumers.

53. The excessive indulgence in any of these does not incite to unpremeditated crime, violent or otherwise. It does not make the consumer like to injure others.

54 and 55. No.

124. *Evidence of I. PONNUSAWMI PILLAI, Private Practitioner, Pothawar, Salem District.*

1. I beg to submit very humbly the explanation regarding the hemp plants, etc., which are as follows :

3. The hemp plants are abundantly cultivated and grow itself in Jewatho hills, Cunjumalai hills, Shevaroy hills, and Kollimalay mountains in the district of Salem.

14. Ganja, charas and bhang are mostly prepared in every town and village within the district of Salem.

16. Bhang is prepared generally by the people in their houses who are accustomed to it, and it is prepared from the hemp plant wherever it is grown; and even ganja and charas are also prepared from the wild plant wherever it is grown.

19. It is used for smoking and also mixed (in Sagcon) with different substances by native doctors for different diseases according to the Indian medical books of ancient authors. It is used in almost all parts of India.

20. Sanyasis, bairagis, and other inhabitants who are accustomed to it throughout the whole district, especially in northern parts of India, and, I submit, $\frac{3}{4}$ of the portion of people are in the habit of using the above drugs throughout India.

24. Especially Musalmans, sanyasis, pilgrims, bairagis, and others who live with their families in different castes eat and drink bhang, etc.

25. The use of ganja, charas and bhang are gradually increasing day by day. The people are much more accustomed to the practice of using them, because some people think it healthy and comfortable to their bodily strength, and others consider that the use of ganja and bhang, etc., will help them to place their whole thoughts on the Supreme Being without any temptation to menial acts.

28. The persons, who are accustomed to eat and smoke ganja and other drugs, generally smoke and eat $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ pollums weight a day. The cost of the drugs amounts from 3 to 12 pies for those persons who are moderately in the habit of consuming them.

32. The persons who are accustomed to use that drug generally before and after meals and in friendship, they use it in (Thumkurrah) society, which means a place purposely and separately fixed by a number of people for smoking and eating these drugs; also they use it even in religious matters, and they are in the habit of using them accordingly.

33. Most highly regarded. Those who are addicted to morality dislike it, and others think it a

social and religious practice. The use of these drugs are generally criticised by those people who are not in the habit of using them. The persons who are accustomed to its use, worship a god, some with two hands, and others salute them before commencing to eat or smoke.

39. It is not injurious to those people who are accustomed to it for years together.

40. Ganja and other drugs are not in any way given to animals, but it is used by the native doctors for the following diseases:—Diarrhoea, looseness of bowels, cholera, gonorrhoea, and other diseases.

41. It is beneficial to those people who are accustomed to it, but, if a person newly practises it, I think certainly it leads him to lose his senses until from giddiness he falls down.

42. Of course and undoubtedly it is not in any way harmless or injurious to those community who moderately use and are accustomed to it.

43. The moderate consumers are not in any way offensive or troublesome to their neighbours.

44. A sort of giddiness. It is refreshing; it causes hunger, and creates appetite. The giddiness will last 2, 3, 4, 5 hours (that in smoking larger quantity and eating by mixing them with other substances, it will last 6 or 7 hours or a whole day, till next morning, without sleep, or sometimes with fast asleep). The consumers will think that they are out of this world till they come to their proper sense.

45. The habitual moderate consumers, by the use of these drugs, produce moral effects, physical and mental, only to those people who are accustomed to it, and not in any way destructive.

49. As far as my knowledge goes, I think with regard to the use of these drugs are partly good and partly destructive. (Persons who use it with good meals is comfortable for them and those who live with light meals it is destructive to them.)

51. In certain cases before committing any criminal act, the criminals generally bhang themselves to do an act without consideration.

53. The use of these drugs causes sometimes indulgence and incite to commit unpremeditated crimes, violence, and there may be several cases in which the police apprehend them for annoyance to the people in the public roads, etc.

54. Yes.

55. Of course, the criminals generally smoke and without any mixture, eat also mixing it with different substances to fortify themselves in order to commit any criminal act without meditation.

125. *Evidence of ABDUL KARIM SAHIB, Native Physician, Namakkal, Salem District.*

1. From observations and from personal experience in making lagiums, etc., out of the drug for the last 10 or 12 years.

3. In parts of Namakkal taluka the plant is seldom cultivated in one or two fields. In Kalar-gari, Meedalapatty, and Sehamppapatty villages the plants are so cultivated.

14. Ganja only to a small extent.

16. As far as I know, preparations of charas or bhang is not made anywhere here. Ganja can be so prepared.

19. Ganja is used for smoking. Lagiums, such as matharakameswari, massthanachenthamani, thathupusti, are made out of it. The leaves of the plant with other medicinal drugs are applied for headache.

20. Hill tribes and bairagis. Two per cent. of the population of Kusba Namakkal would smoke ganja.

28. For smoking purposes, 1 pie for a day. Ganja is mixed with tobacco and smoked. For the consumption of 15 days, 1 pie worth of ganja is enough when used as a lagium with other drugs.

32. Karuppannan, Kali, Mathuraiviran, and Malai Kavalan Swami are said to accept ganja as offerings in the shape of lagiums.

33. (a) It is generally considered to be a vicious practice.

(c) No.

39. Smoking is more injurious than eating ganja in the shape of lagiums. In the preparation

of lagium other cooling substances are included, and hence it is less injurious. On the other hand, it is conducive to health. Smoking is more injurious, because the smoke gets into and affects the lungs, and makes the man thin and wiry.

40. Yes; prescribed by native quacks. Yes; they are used in the treatment of cattle disease.

41. Yes; medicially when taken in lagiums.

43. Yes; it would even make a brave man a coward.

44. Excitement, intoxication followed by sleep, commonly not refreshing, creates appetite, very nearly six hours. After-effect is weakness. Generally ganja eaters take ganja just before their meals.

45. No doubt it produces noxious effects. I know of about 15 men who have become wiry, day by day. In the long run they were subjected to bronchitis, and their eyes became dark gradually. The heat in them increases as well. They were under my treatment until they recovered.

49. Yes.

51. Ganja eaters do not undertake to commit any actionable wrongs, as far as I know.

53. The indulgence to any degree would not in the least induce the consumer to commit any crime. I do not know if this has ever led to homicidal frenzy.

54. No.

55. I have not heard of any such case.

126. *Evidence of H. RUNGAPPA, Medical Practitioner, Vishram Baugh, Madras.*

The present system of administration puts restriction only on the sale of the hemp drugs. The result is their cheapness, which is one chief inducement for their free use by the lower classes mostly. The objections are the following :—(1) although these drugs are used primarily as stimulants, yet they have got the intoxicating effect also. In these state of intoxication, the individual is very prone to commit acts of homicidal violence. (2) Frequent use of these drugs leads to the insanity of the person, though under proper treatment he may recover to a certain extent for the time being. It may not be out of place to mention here that the admissions under this heading into the lunatic asylums are no more a criterion of the baneful effects of these drugs upon the nervous system than are the hospital returns of the amount of sickness prevailing in this country. Although the Government has very humanely established three asylums within the easy reach of the people of this presidency, yet the well-known caste distinctions observed from time immemorial are an effectual bar to keep out a large number of lunatics from coming within the observation of the lunatic asylum officials. Still a good proportion of the admissions are due to the alleged abuse of the hemp drugs. (3) Again, these drugs are used as the means for committing robbery or for violating the modesty of women. (4) By the ignorant wives these drugs are credited with the power of gaining or restoring the affection of their husbands. This furnishes another source of poisoning, though with the best of intention. These are the main objections for placing the

drugs within the easy reach of such persons as have not received medical training. If the result of the inquiry by the Commission shows that prohibitive measures are not feasible, restrictions at least may be placed on the cultivation, manufacture, possession and transport of these drugs.

2. I propose to take these four questions together for two reasons—*firstly*, because the people who use these drugs observe no particular difference between ganja (or the flowering tops) and bhang (or the leaves with the small stalks); in fact the article sold in the licensed shops contains both the leaves with the small stalks and the flowering tops powdered together; *secondly*, the large number of preparations of the plant are made from ganja, a few liquid preparations only being made from the leaves alone. Moreover, it is the mixture of ganja and bhang that is used for smoking. I am not aware of charas being much used in this presidency. The solid preparations of ganja are the following :—The well-known majum, a confection made of ganja boiled in milk and mixed with spices, ghee, and sugar. Purnath is a similar preparation, but alleged to be less strong. Madath also is a confection, but contains opium in addition. Lehyam meaning confection, sakkarai meaning sugared preparation and halwa meaning sweatment, are all synonyms for majum. Billai denotes the same, having special reference to the form in which the confection is sold. Sabji and bhoja are the Hindustani synonyms. The liquid preparation of bhang, or the leaves with the small stalks, goes by the name of dudia, because dud,

meaning milk in Hindustani, is its constant ingredient, although the beverage is prepared in more ways than one. Ramarasam is the Dravidian synonym for the same. Muhammadans, bairagis (pandarams or ascetics), Maharatta Sudras, Gujarati Sudras and Pariahs are the class mostly addicted to the hemp drugs. Rarely the middle and upper classes of Hindus use them on gala days. The districts in which the drugs are most extensively used are—Ganjam, Vizagapatam, Godavari, Kistna, North Arcot, Bellary, South Canara, Malabar, Madras City, Tanjore, Trichinopoly and Salem. I think about a fourth of the population of this presidency use the drugs at the least.

I think the use of the hemp drugs is on the increase for the simple reason that it is spreading among the middle and upper classes, particularly of the districts named above.

The only ingredients that are mixed with the drugs are opium and dhatura.

Social customs.—On gala days, such as marriage or other festive occasions, which are many in the year, or when jolly good companions think of going to the native drama, they use these drugs as stimulants.

Religious customs.—During Muharram or other religious occasions, Muhammadans make use of them plentifully. So do the Hindus during the Dasera festival in particular.

The practice of consuming these drugs is not at all based on any social or religious grounds. The drugs are used solely for their stimulating and intoxicating properties.

In Southern India there is no custom of worshipping the hemp plant by any sect whatever.

It is perfectly feasible to prohibit the use of the hemp drugs except for *bona fide* medical purposes. It will not occasion any serious discontent; and hence there is no occasion for any political danger. The prohibition will not be followed by greater recourse to alcoholic stimulants than at present. It may lead to more free use of tobacco for smoking, chewing, as well as for snuffing. By way of explanation it may be mentioned that among the lower classes, who are mostly manual labourers, the use of alcoholic stimulants has all along been a necessity on grounds of economy and of health; but the causes of the abuse of alcoholic stimulants, as well as their sphere of action, are altogether different, and hence have no bearing on the subject on hand, contact with foreign nations being solely responsible for the abuse of alcoholic stimulants among the middle and upper classes who are least fitted to withstand the baneful effects of the stimulants owing to their sedentary habits as well as their vegetable diet in the large majority of cases.

Except when prescribed as medicine, even moderate use is not only not beneficial to health but positively harmful in its effects.

Oral evidence.

1. I am a graduate in medicine (M. B.) of the Madras University. I am a private practitioner. I have been practising eight years, mainly in Madras. I have had no special experience of insanity. In the Medical Jurisprudence class there are lectures in the Medical College on insanity. There were forty lectures on the whole subject of Medical Jurisprudence. I forget how many dealt with insanity. There was no clinical instruction on insanity.

* A full enquiry was made on the subject of the shops made by him before the Commission.

45. I have seen patients under the influence of ganja. In regard to homicidal violence, I have seen no homicide committed nor homicidal violence; but I have seen violence. I have also known many instances of people accustomed to the use of ganja who have been insane for months together. They have not been sent to the asylum. I know about a dozen cases in respect to which I was told that insanity was due to ganja. I have had no such case of insanity under my own treatment. The cases I knew were in South Canara in my own village eight years ago before I was practising medicine. There were four such cases in that one village. These are the four I know best. I have not been back there since. During the time I have been practising I have never come across a case of insanity produced by the drug. My visits to Canara were only occasional during my five years of study; so that my knowledge of these four cases may be regarded as only hearsay knowledge. It is because the facts of a man's life in a village are well known, and because when the ganja consumer is under restraint and cannot get ganja he gets better, it is on these grounds that we think the insanity is due to the ganja; but in order to come to a perfectly satisfactory conclusion in any particular case, some personal observation would be necessary. I did not make such observation in any case.

There are many more lunatics from all causes in the country than the asylum returns show. Therefore there are more lunatics in the country whose insanity is due to hemp drugs than are found in the asylums. I think that you may take the proportion of hemp drug insanities to total insanities in the country as the same as that in the asylums. I think there are 500 to 800 admissions from all causes to the three asylums of this presidency every year. I think those from hemp drugs would be 50 to 60, rather under 10 per cent.

59. I am decidedly of opinion that, if possible, there should be further restrictions in regard to these drugs. At present there are hardly any. I regard increased taxation of the drug as a justifiable means of increasing restriction. I should like to see restriction on cultivation, manufacture, transport and sale, as indicated in my paper. I have nothing to add. I think the number of shops here is too large for the city of Madras. I have been visiting these shops—I mean the places where the preparations are sold, not the drug in the crude form. From their situation and hygienic surroundings they may be called dens. They are kept by people who sell preparations, and these ready-made preparations (in solid or liquid form) are consumed (smoked and drunk, as the case may be) on the premises. I saw, for example, dudhia sold (a liquor preparation of ganja). I have seen half a dozen such places in Triplicane suburb alone. Opium is also sold in these shops, not country spirits. I do not think they are recognized by the Government*; but they are known to those who frequent them and can be searched out. Such shops should be abolished altogether, prohibited by law. I do not think it is difficult to tell the opium-smoker from the ganja-smoker. The ganja-smoker is generally in very high spirits, and, moreover, when the opium-smoker lets out the smoke we can smell opium in it. The opium-smoker is quieter. I saw in the same room people smoking opium and others smoking ganja. Tobacco was used with both drugs. But with the opium there is a solid preparation for smoking. I saw both ganja and opium. The pipes are

and Dr. Rungappa failed to substantiate the statement

separate. I visited the shops in the evening about 5 or 5-30 p. m. I went on four different days. I saw no violent or unseemly behaviour. I saw some women there. I think they were also

accustomed to the habit, but did not see them smoking. I believe they were prostitutes. From there noisy talking, I thought they were using drugs in some other form.

127. Evidence of the RAJA OF RAMNAD,* *Madura District.*

1. None.
3. In none, so far as I know.
7. I know of none.
19. The dried leaves of the plant are used in making a confection or electuary along with sugar and other ingredients, of which I am unable to give particulars.
20. I know of no classes of people, except travellers from Northern India, who smoke this drug.
24. Some among the labouring classes eat it in the form I have mentioned in my answer to Question 19; it is also employed as medicine, and when so employed forms one of a number of ingredients of which the medicine is made. In either case, the number of persons by whom and the extent to which it is used is very limited.
26. I should say that all who consume this drug are occasional moderate consumers. I have not sufficient knowledge of the drug to distinguish the different forms of it.
30. So far as I know, the eating of bhang or ganja (whatever that may exactly be), is no characteristic feature of convivial or other gatherings, and it is confined mainly to the male sex.
31. I am not aware of any case in which the moderate developed into excessive habit.
32. I am not aware of any custom, social or religious, with which the consumption of the drug is associated.
33. I think that the habitual use of this drug is generally in disrepute for the simple reason that it is apt to induce inebriation. I am not aware of any custom of worshipping the hemp plant on any occasion by any sect of the people.
35. Where the use is habitual, which however is, so far as I know, very rarely the case in this

country, the feasibility of its prohibition is open to question. It might be consumed illicitly, and it may not be possible to enforce the prohibition except by recourse to extreme measures. I do not think, however, that the prohibition would occasion serious discontent. A political danger it most assuredly would not amount to. It is quite possible though that the prohibition may be followed by recourse to alcoholic stimulants or other drugs.

36. I do not know any specific instances, but I think it probable for the reason that alcohol more readily induces inebriation, and is more readily procurable in this country.

40. I think that in the case of particular complaints, as insomnia generally and chronic diarrhoea in children, its use in minute doses is prescribed in ancient Hindu pharmacy, but I am not able to give particulars.

41. I think it may be in all the three cases specified. I do not know, however, that the drug is used for any of the purposes by any particular classes. All that I know is that it is used very rarely in this country, and that it is its moderate occasional use that is beneficial.

43. I have not met any consumers, moderate or immoderate, who were offensive.

49. I think it is in rare cases, and in those with injury to general health.

55. I think they do in rare cases.

61. I do not know that it is produced anywhere in this country.

62. I think not.

65. I do not know that any tax is imposed on the cultivation or consumption of, or the traffic in, this drug.

128. Evidence of SRI VASUDEVA RAJAMANI RAJAH DEO, *Kshatria, Zamindar of Mandasa, Ganjam District.*

1. I am answering the questions from my local experience and the knowledge in medical books.
3. It is a common produce in almost all the districts to a very small extent, but I cannot mention the district in which the hemp plant is abundant.
14. In our country ganja and bhang are the two modes of preparation which are done in a private place, and that at the rate of $\frac{1}{4}$ of a tola for each person.
16. It is generally prohibited from using it in houses, except in maths, retreats, halls, and such places. Bhang is also used in such place where it is abundant. It cannot be used without any mixture in those places where it is produced.
19. There is a peculiar mode of smoking it, and people joyfully enjoy it when it is mixed with sugar and spices. This use is common in the districts of Ganjam, Puri, Cuttack, Balasore,

Midnapore, and Sambalpur; but I have no knowledge whatever of the use of charas.

20. It is used by all sorts of people, including Brahmans; but almost half the population in the Puri district and one-fourth of Ganjam, Cuttack, Balasore, and Sambalpur districts smoke ganja.

24. In the Puri district half of the Brahmans, etc., drink bhang; but I cannot say what portion of people in different castes eat or drink bhang.

25. Now-a-days both the uses of ganja and bhang are increasing, owing to the great desire of many of the Hindus to become intoxicators, and at the same time to the objection raised by them for the use of liquor and other such liquids.

28. Generally a man can use $\frac{2}{15}$ of a tola of ganja, and on that behalf he spends half an anna a day.

32. As a social custom, as well as a habit, people use it very eagerly to spend their time in merriment, but it is not a religious custom.

* Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

33. Almost all the people say that smoking ganja is a bad habit. It is socially used by the mendicants only. But there is no rule that the polite and the religious men should use it. I cannot say much about it. On the whole it is injurious, as it spoils the brain and disturbs the calmness of the mind. It often deviates a man from the right path. He will become quite mad if he cannot get it in its proper time. He will feel much disgust without it, and will be roused to a spirit of robbery. It spoils the reputation of a man. Nobody of any sect has at any time worshipped the hemp plant.

39. Smoking is more injurious than drinking and eating, for it weakens the strength and causes dry cough in the consumer.

40. Native doctors mix these drugs with other materials as a remedy for the following diseases: colic, diarrhoea, dysentery, asthma; but it is in no way used in the treatment of cattle disease.

41. Ganja and bhang taken for merriment's sake do not benefit the consumers, except when they are served as medicinal elements.

42. It gives no benefit, but it is the source of madness.

43. They are offensive to their neighbours, who speak ill of them.

44. A habitual consumer shows himself active for a while immediately after he uses it. The consumer thinks himself to be stronger owing to the senselessness. He becomes like mad and feels hungry; but it cannot create appetite or relish for food. Daily consumers feel better for not more

than an hour. At last it digests mucous slime. The consumer feels all sorts of inconvenience if he does not find ganja in proper time. It compels a man to feel the want of it until he gets ganja for the next time.

45. The habitual moderate use of ganja is the cause of ill-health, both mentally and physically. I am sure that those who are well-disposed and make a moderate use of ganja become stout, vigorous, and cheerful.

49. The use of ganja does not give any strength, but a man feels pleasure that he is strong.

51. It seems that ganja increases the bad characters of the habitual consumers who practise it or use it once a day, and hence show their violence.

53. Ganja, when taken excessively, excites a consumer to commit any kind of violence. About 23 years ago there was a consumer, named Podmanapha Marvary, who actually tried to stab one Darsarathi Chavv Patnaik with the cruel intention of murdering him.

54. I am not aware of instances in which the consumers take ganja to commit a premeditated act of violence and defend themselves by pleading that they were out of their senses; but it is said that such things may be done.

55. It is possible that a criminal, in order to further his designs, can induce his victim to partake of any of these drugs and so stupefy him. This drug, without any admixture, when taken, causes consumption and bile; but it does not entirely stupefy a man.

129. *Evidence of SRI SRI SRI GOURA CHANDRA GAJAPATY NARAYAN DEO GARU, Kshatria, Zamindar of Parlakimedi, Ganjam District.*

1. General local knowledge.

3. It does not grow spontaneously within my knowledge.

14. (a) Generally everywhere.

(b) In Parlakimedi, Hiramandalam, Varanasi, and Battili.

(c) In a few houses; quantity not known.

16. Bhang is prepared in some houses. It can be prepared from ganja leaves grown anywhere. I know of no wild plant from which these can be prepared.

19. Charas is used only for smoking; ganja is used for smoking, and is also drunk when mixed with bhang and other drugs. The use is not confined to any place in particular.

20. A small proportion of all classes of people (about 10 per cent.) smoke ganja in this taluka.

24. A very small proportion, say one per cent., drink a preparation of bhang.

25. It seems to be on the increase. Why I do not know.

28. Cannot say.

32. I know of none.

33. The use of these drugs in excess is regarded

as very bad, but in moderation the effect is considered good. This is public opinion. There is no custom of worshipping the hemp plant.

39. Cannot say.

40. The essence of ganja leaves is considered valuable medicine, and the leaves of the hemp plant are sometimes used in diseases of cattle.

41. Yes.

42. Yes; moderate users are no worse than other members of society.

43. Yes; moderate consumers give no offence to their neighbours.

44. The moderate use of these drugs produces exhilaration and creates appetite. It is refreshing and allays hunger, but afterwards causes drowsiness.

45. Speaking generally, the moderate use of these drugs seems to produce no evil effect of any sort on the consumers.

49. A preparation of these drugs called "halwa" is sometimes used for this purpose.

51. I do not know.

53. I know of no case of this sort.

54 and 55. I do not know.

130. *Evidence of TIMMARAZU VENKATA SIVA RAO., Brahmin, Landed Proprietor and Chairman, Municipal Council, Chicacole, Ganjam District.*

1. As a landed proprietor, I very often come in contact with many persons who use hemp drug preparations and many native doctors and others who make such preparations.

3. I have knowledge of no district where the hemp plant grows spontaneously.

14. On my enquiry I have come to know that only ganja and bhang are prepared in this country. As far as my knowledge is concerned, they are, to a great extent, prepared in big towns. From this I do not mean to deny totally the preparations in small towns and villages.

16. (a) Yes.

(b) and (c) I believe so.

19. They are used not only for smoking but also for eating and drinking. Ganja mixed with sugar, milk, and such spices as cardamoms, nutmegs, etc., is used for drinking. There is a preparation called "halwa," of which the chief ingredient is ganja, not to speak of several native medicines, of whose component parts ganja is one. The halwa and the native medicines being eatables, ganja is said to be used for eating also.

20. I do not see that smoking of ganja is confined to particular class or classes of people, as I understand that all classes of people generally smoke it. On rough calculation I can say that not less than five per cent. smoke ganja.

24. As regards classes of people, *vide* my answer to Question 20.

25. I should think it is on the increase, inasmuch as I find now greater number of bhang-drinkers almost in every town, of which I have some knowledge, than ten years ago.

28. I do not think that habitual moderate consumer can consume more than a tola a day of the drugs, which, I am told, will not cost more than one anna. But there is a separate class of people called bairagis who are said to devote a major portion of their life in wandering over the country, and who, it appears, consume two tolas, or a little more than that, a day in smoking.

32. It has almost become a "social custom in several big towns that bhang is prepared and distributed, along with other preparations, among the guests, on important occasions at dinners. There is a class called Rajputs, or popularly called Bondilis. They observe annually a festival named

Holi. It is reported that it is a custom among them to use halwa or bhang during that festival.

33. It is generally regarded with contempt. Yes; the public opinion is that the practice is bad. There is a popular opinion that the use of any form of narcotic acts against the intellectual powers of a person; hence it is generally in disrepute. I am not aware of any custom of worshipping the hemp plant.

39. No; on the other hand, smoking is said to be more injurious. As the effect of the smoking does not last long and the smoker is incapable to resist frequent temptations, he is apt to smoke more frequently than a drinker or eater drinks or eats. These admittedly being drugs of an intoxicating nature, the more frequent the use of them is the more intoxicated the user is. Hence smoking is said to be more injurious.

40. (a) Yes.

(b) I have no knowledge.

41. I do not think so.

42. I cannot definitely say.

43. I cannot say that they are entirely so.

44. Produces drowsiness or half consciousness; refreshing; produces intoxication; allays hunger; creates appetite. The length of time in which the effect lasts, varies according to the nature of preparation of drugs. I have no knowledge of after-effects. Yes; it does produce longing and uneasiness.

45. Yes; I believe it does produce noxious effects physically, it weakens the constitution mentally, and it interferes with the brain.

49. Yes.

51. Yes. These drugs being productive of intoxication, the user is not unlikely to have recourse to any crime in general under the influence of the drugs, especially as the use of these drugs has more connection with gambling and theft, to which the consumers have general recourse with the view of getting money for purchasing these drugs, inasmuch as the consumers are in not less than 75 cases out of 100 vagabonds, notorious bad characters, and bairagis, who spend their life in rambling over the country depending on others for their expenses.

53. Yes. I am not aware.

131. *Evidence of C. MUTHU KUMARASWAMI MUDELLIAR, Zamindar, Chunampet, Chingleput District.*

1. There are some of my tenants who are habitual smokers; and pilgrims, generally bairagis, from the north, on their way to and from Ramaswaram, halt in good numbers here. Most of these either smoke or drink ganja. Conversation with them and observation into their habits enable me to say something about the subject on hand.

3. I have not known any.

14. None to speak of.

16. Bhang, as is understood here, is a compound of ganja leaves jaggery and pepper. Such bhang is prepared by individuals, for their own private use, with ganja leaves procured from the market. People this side have no knowledge of preparing ganja from the hemp plant direct.

19. Charas is not known here. Ganja leaf is the only article purchased from bazaars. The people here either smoke it, or make a compound of it with pepper and jaggery, or with pure jaggery only, and take it internally. This ganja leaf, as obtained from bazaars, is also used for medicinal purposes, such as puranathy.

20. This is not a commonly used drug here. The few that use here belong to the flesh-eating lower classes. The medics, who impose on the superstitious public with the garb of an ascetic, take to this habit of smoking. This habit of smoking is invariably found among the Hindustani bairagis or pilgrims from the north.

Since the use of ganja is not prevalent to any

very appreciable extent in any particular locality or with any particular class, and the use itself is rare with the standing population here, it is not possible to connect the use of it to any special locality or class.

24. *Vide* answer to Question 20 *supra*.

25. The use of ganja is certainly on the decrease. The prohibition, by an Act of Government, to trade in it without a license, eventually put a stop to its being sold here by the village bazaar men, who thought, and still think, it not worth the trouble to procure a license to vend ganja in a place where it is not generally wanted by the surrounding resident inhabitants. Before the intervention of this license, I know every bazaar man had some quantity of ganja in his bazaar along with other articles of consumption. I also know that every bairagi from the north and every mediant sanyasi was being supplied by my elders with ganja in addition to the customary ration given him; and that this practice of doling out ganja stopped with the scarcity of the articles in the local bazaars, consequent on the apathy of the bazaar men here to take out licenses, as required by the Act.

Further, the use of these drugs, unless accompanied with good nourishing food, is productive of consumption and general debility, which unfits one for any useful pursuit.

This evil effect over the system has deterred some of the habitual consumers of the working class here, who have to make their living from daily earned wages only, from continuing its use. I infer, therefore, that the growing poverty of the country has something to do with the decrease in its use.

28. The average allowance to habitual moderate consumers ranges from half a polum to one polum per diem, costing between half and one anna per head. At any rate, it need not exceed two rupees per mensem per head.

32. I am not aware of any custom, social or religious, in regard to the consumption of these drugs.

33. Hindu religion, I think with very good reason, is quite averse to the use of any drink or drug that will bring about an abnormal state in the mind of a man. Addiction to the use of these is included among the five greatest sins—to wit (1) murder, (2) theft, (3) use of intoxicating drink or drug, (4) wounding the feelings of one's preceptor, and (5) falsehood, mentioned in Hindu shastras.

Since Hindu social customs are so interwoven with their religious observances, it is not possible for anybody, however depraved otherwise, to get over that feeling of abhorrence—at any rate of contempt—towards one who uses these drugs. I am not aware of any custom of worshipping the hemp plant by any sect of people here.

39. The consumers of these drugs say that the effect of smoking is of less duration than that of eating. Although the natural inference from this is that eating or drinking is more injurious than smoking, since smoking directly acts upon the lungs and produces consumption in a short time, I think it is equally, if not more, injurious to the physical well-being of a man.

40. It is generally in the preparation of a medicine called the puranathy lagyam, which is considered to be a good tonic and a reliable appetiser. These ganja leaves are used by some of these native quacks in preventing excessive purgation. It is also used by them in the treatment

of children for restlessness. Many a mother purchases the preparation of this, called maajanam, and administers the same to the children to prevent their being troublesome at nights. Since among the native quacks—for there are very few learned native doctors—the preparation and administration of medicine is based, not upon any known treatises, but purely on practice in vogue in his family, it is not possible to ascertain to which school of doctors any given quack belongs. However this might be, there are works made by some rishis or sages, such as Bhogar, etc., who prescribe the use of this drug in the preparation of medicines, such as puranathy lagyam referred to *supra*.

Even among the veterinary village quacks there seems to be no definite following of any approved work on the treatment of diseases. It is used in the treatment of one of the epidemics among cattle called quinsy.

41. Since the use of any intoxicating drug will never, I believe, conduce to the well-being of either the physique or mind of man, I am of opinion that even a moderate use of them will never be beneficial in its effects, unless prescribed by a medical man as an antidote to any physical derangement or ailment.

42. Since I have not known of any case of violence to one another among the bairagis or other people who consume ganja, like among those that drink toddy, arrack, or other spirituous liquors when under its influence, I think the moderate use of this narcotic is harmless.

43. I think they are inoffensive to their neighbours.

44. The immediate effect of the moderate use of this drug on the habitual consumer is, I am told, a little intoxicating, and refreshing to those that are subject to any chronic physical pain, inasmuch as the pain is not felt when under its influence. It kindles and increases appetite rather than always it. Bairagis, when they reach their destination for the day, refresh themselves first by smoking ganja, and then attend to their cooking and other works.

In smoking the effects last for two hours, and in eating and drinking for six hours. The want of subsequent gratification is productive of the same sort of uneasiness as an inveterate tobacco smoker would feel in the absence of his usual cigar.

45. It weakens and emaciates one, and it produces consumption; *e.g.*, there is a tenant of mine at Chunampet who got into the habit in his early days, broke down from want of proper nourishment and dropped the habit. This is the physical effect.

Mentally it weakens the understanding powers of a man; *e.g.*, almost all the smokers are not able to grasp or understand without effort what is told them by others. Whenever they are under its influence, their attention is directed to solely any one thing they might have in view, all other things but that one thing in the world making little or no impression upon them.

There is a weaver here who is mostly under its influence, and never directs his attention to anything but the idea uppermost in his mind. He practises yoga. He sometimes looked a mad fellow. He is an ordinary fellow.

Morally, they are indifferent to all laws, social and religious, and they won't get out of their way to put their neighbours, when they offend against the

laws of society, into the right path, or even remonstrate with them for their unlawful conduct. Further, they themselves don't care about the laws of society as far as decency and caste prejudices are concerned. I am therefore of impression that they lose all idea of morality, and don't feel the moral responsibility which one ought to have towards society.

49. It is, as in the case of puranthi lagyam.

51. The use of this drug here is not so very common as to draw any such conclusions.

54. I have not heard of any such case here.

56. I am not able to answer this.

59. The effects of ganja and opium is not much felt here. It is the toddy and country arrack that is the chief cause of all poverty and crime. If the Government should really have the elevation of the lower classes, such as Paryahs, at heart, they should with a strong hand prevent the use of these cheap liquors by them. The Government need not be afraid of it. This drink is not a necessity here, but it is an immoral luxury. The climatic conditions don't require it. The abolition of this, and the extension of primary education following in its trail, will, I am certain, elevate them to an inconceivably better position in an incredibly short time. It is not the want of means of subsistence that makes the Paryah the degraded creature he is; but it is this tempting cheap drink near at hand that drains all he has, and leaves him the miserable wretch that he now is. Government may modify the Darkhast rules in any manner they like; and the executives may, in conjunction with those rules, adopt means to deprive the mirasidar of his other property besides to enrich the Paryah. All this will only be the additional means given to an unrighteous and intellectually degraded class to proceed in their iniquitous course with more facility than before.

If the missionaries who justly raised the cry against the present degraded condition of the lower classes, especially Paryahs, suggested first the prohibition of this drink as the chief remedy against the continuance, if not the furtherance, of this degradation, and then based their elevation on (1) education, and (2) facilities to acquire lands for cultivation, the intelligent rural population would have given them credit for sincere philanthropic effort. Since not a word was said by them about this pernicious habit of drinking, where the missionaries themselves seldom set a good example, their present agitation to elevate the lower classes is viewed very much with suspicion; for such facilities to acquire lands, in the absence of an effectual check to their usual work, will, without giving them the benefit sought for, only tend to facilitate the work of the local missionaries, who have to show a good out-turn of their work to the mission that pay them in the shape of more evangelisation; inasmuch as it is a patent fact that it is more the hopes of material help held out to them rather than real conviction in Christianity that brings converts from the lower classes, especially Paryahs, who are admitted by the missionaries themselves as a class intellectually low at present.

Since the cause of all the misery here is the cheap drink of toddy and arrack within an easy reach of the lower classes, I earnestly request that steps may be taken, as early as practicable, to prohibit the use of this drink as effectually as possible, and save the lower classes from their present miserable state. Since the absence of one form of intoxicating drink or drug will only incite people to the adoption of another unrestricted one, I think the use of all sorts of intoxicating drink or drug ought to be strictly prohibited by law, except in cases of maladies, where the doctors can find no other means of relieving the patient.

132. Evidence of M. ETHERAGULU PILLAY, Land-owner, Bezwada, Kistna District.

1. I have been a resident of the Kistna district for the last 26 years, and as I am myself a land-owner, I possess general information of the products of this district.

2. To the best of my information, no narcotic drugs are obtained from hemp plant in this district. Dr. Prain's report, I presume, applies to Northern India very probably. The stem of the hemp plant here is converted into fibre, and the leaves are used as cattle fodder.

3. The hemp plant is cultivated throughout the Kistna district generally, but it grows luxuriously in the part of the district lying south of Bezwada.

4. Janapanaroo and Gogunaroo. They are two kinds, as shown above.

5. Hot climate. Black cotton-soil. Rains, average quantity. Elevation unknown.

6. Dense in some parts.

7. (a) to (c) No.

(d) Yes.

Hemp is cultivated extensively in parts of the district, more especially south of Bezwada.

8. The area of hemp cultivation is on the increase owing to demands for the fibre.

9. No special method is adopted. The ground is ploughed up, as is done for other dry crop seeds.

10. The hemp is not cultivated for narcotic properties. The agricultural cultivators grow hemp also.

11 and 12. I do not know.

13. See my answer to Question 2.

14. No.

15. No kind of narcotic drugs are prepared from hemp.

17. See answer to Question 15.

19. Ganja is prepared from plant specially grown for that purpose. Ganja is used for smoking, and also forms an ingredient in the preparation of bhang, which is drunk. Charas, which is a very strong narcotic drug, is used for smoking. Ganja is prevalent in these parts, but charas is unknown here.

20. The lower classes, especially Muhammadans, smoke ganja. The percentage, as compared with the population of a given place, is very small.

21. Round kind is used in these parts.

22. Charas unknown here.

23. No.

24. See answer to Question 20.

25. On the increase.

29. Bhang is prepared with the following

ingredients: poppy seeds, dry ginger, pepper, milk, rose buds, cucumber seeds.

Dhatura unknown. The above ingredients are used to make the drink palatable. Some of the ingredients possess medicinal properties.

30. Ganja is smoked largely, and there are ganja smoking dens in different parts of the town, where the smokers meet and smoke in company. Male sex, middle and old aged people. No; children do not consume any of these drugs.

31. Yes, by association. Not easily. Yes; there is such a tendency.

32. Religion prohibits the use of such drugs.

33. With disgust and contempt. None. It is in disrepute. It demoralizes people and undermines their health. Do not know.

34. Yes, because these people are so devoted, and the habit becomes a second nature. They almost go mad and become helpless if they are deprived of it. It is difficult to give even an approximate proportion, but the Muhammadan class predominates. By Muhammadaans I mean the poverty-stricken people.

35. (a) Not easily.

(b) Yes.

(c) I am unable to suggest any method.

(d) Yes.

(e) No.

(f) The people who use these drugs are, as a rule, the poorest classes of people. They would have recourse to alcohol but for its costliness. They are sure to indulge in other drugs if within their means to purchase.

36. There is reason to suppose that alcohol is substituted for the drugs by those who can afford to buy it. Perhaps the better wages which is now earned is the cause, and the enormous increase in the importation of alcoholic stimulants, which, I think, is a proof.

Note.—My answers to the questions in this chapter refer to drugs produced from the particular plant called ganja, and not hemp drugs.

58. The hemp drug is not known in these parts, and I am therefore unable to answer the questions on this matter.

60. No knowledge.

68. There are shops licensed to prepare and sell these drugs; but I do not think the vendors can allow people to consume them in their shops.

69. No; the wishes of the people are not consulted. Yes; public opinion ought to be considered.

133. Evidence of P. SESHACHALLAM NAIDOO, *Baliya, Landlord, Merchant, and Chairman, Vetapollem, Kistna District.*

1. The information that I have had is only second-hand, obtained from ganja-smokers.

3. None. It is raised as a crop in Vankazalapad, Noothelapad, Duggupad, Goosapad, and Banpatta Taluka, Kishna District.

14. Ganja is prepared in this district throughout, but bhang is prepared to a very limited extent.

16. Bhang is prepared by the people in their houses. It can be prepared from the hemp plant wherever grown.

19. Ganja is used generally for smoking, and also as bhang.

20. Gushais (bairagis) and a very small portion of low caste smoke ganja throughout the district.

24. Bhang is not used in this district to any appreciable extent.

25. The use of ganja is on the increase. Various are the virtues attributed to it.

28. The average allowance per diem is 3 or 4 tolas a day per man. The cost is about one anna per day.

33. The use of the drug is not in disrepute. There is no custom of worshipping the plant.

41. Yes, as it relieves pain and cheers sinking spirit.

42. Harmless.

43. Yes.

44. It is refreshing, slightly intoxicating. It does not allay hunger. It creates appetite. The effect lasts about three hours. After-effects none. The want of subsequent gratification produces much longing and uneasiness.

45. None.

49. The use of ganja is practised as an aphrodisiac.

53. None.

54. No.

134. Evidence of AZIZ-UD-DIN ALI KHAN, *SAHIB BAHADUR, Jagirdar, Cherlopalle, Gurramkanda, District Cuddapah.*

1. By making enquiries from people who are in the habit of using ganja.

2. These definitions may be accepted.

3. Punjab, Hindustan, and other parts of the Bengal Presidency.

4. There is only one name to the plant—ganja plant.

5. The climate should be temperate (*i.e.*, neither too cold nor too hot). The soil should be loamy, red sand, ash-grey. The land may be a little elevated.

6. The growth of the wild hemp is scattered.

7. Hemp plant is cultivated among other vegetable plants only for the production of ganja to a small extent. It is not separately cultivated. It is planted in the yards of the houses and gardens.

8. There has been a decrease in the cultivation of the hemp plant owing to the fact that license should be obtained for sale of the same.

9. 1st—Red mud and manure are mixed, and ground prepared, and in it seeds are sown or plants planted.

2nd—The bed is prepared by killing dogs, and making them stand in the pit with the mouth wide open, and in it the plant is planted. The ganja thus produced is the best kind, because even a bee that sits upon it is attached to it and cannot fly.

3rd—Method by putting cow-dung.

4th—After the plant is grown a little, the twigs are split, and opium is put into it and tied together. The ganja thus grown is also one of the best.

Similarly arsenie is also put in.

10. They are of the same class as other agricultural cultivators in this district.

11. No.

12. No. The male plant with white flowers is extirpated.

13. (a) No.

(b) The conditions are same as those mentioned in answer to question 5. The hemp plant does not thrive when the land is miry.

14. (a) Ganja consumers prepare ganja.

(b) Not prepared in this country.

(c) Sweatmeat sellers to some extent.

15. (A) The hemp leaves are washed and pressed between the thumb and palm, and the water is thus extracted and then dried; tobacco is added and then smoked.

(B) Not in this part of the taluka.

(C) The hemp leaves are boiled, the water thrown out, and seeds separated.

This is mixed with kasis, pepper, and spices, and grounded; this mixture is put into jaggery-water and then used as a drink.

16. (a) Yes.

(b) It can be prepared from the plant grown anywhere.

(c) No.

17. Gosains, lambadis and other wandering tribes to a great extent, and generally other people to a little degree prepare ganja and bhang.

18. Ganja is the only drug that does not deteriorate by keeping. It can be preserved any length of time with ordinary care. It deteriorates when mixed with water or any other thing.

19. Ganja and charas are used only for smoking.

20. Fakirs and others, gosains, lambadis, and others to a small extent. Those that use these may come up to 4 per cent. throughout the district.

21. Any kind is used.

22. Foreign charas is chiefly used. It is not known whence it is imported.

23. Yes, by fakirs, bairagis, and sanyasis, and by only a few of the other classes; 4 per cent.

24. The above classes (a) 2 per cent., (b) 1 per cent.

25. The use of these is on the decrease. The vending of licenses and the increase in their prices are the main causes for the decrease.

26. (a) 1 or 2 per cent.

(b) 4 per cent.

(c) 1 or 2 per cent.

(d) 2 per cent.

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27. Classes of people mentioned in Query 23. This practice is got into for putting down anger and suppressing manly power.

28. (a) 2 pies, about 2 tolas.

(b) 4 pies, about 4 tolas or 6 tolas.

29. (a) Ordinarily dried tobacco.

Dhatara is used to cause much intoxication. These are mixed merely to cause intoxication. I do not know of any bhang massala.

30. One or two tolas in solitude, and a seer or a seer and half in company. It is restricted to the male sex and is used in any time of life. No.

31. The habit is easily formed. It is difficult to break off the habit. No tendency in any of the drugs. Habit develops this tendency.

32. No.

33. (a) The consumption of the drugs is regarded as a source of making the mind steady.

(b) No. The use is generally in disrepute, as he cannot manage himself being out of senses.

(c) No.

34. Yes; for some time. Because they would find it difficult to give up the practice. Only 2 per cent. can do so.

35. (a) Yes.

(b) No.

(c) The prohibition could be enforced by putting a stop to the cultivation of these drugs.

(d) No.

(e) No.

(f) The prohibition would not be followed by recourse to (a) or (b).

36. Some who use these drugs also have recourse to alcohol. Because they don't find much intoxication in this.

37. Charas causes greater *nisha*.

38. All have the same effect.

39. Smoking is more injurious, as it causes consumption and the lungs become blackened. The lips are also blackened. The body becomes thin and reduced.

40. Ganja is used on account of its medical qualities for allaying pain and increasing the digestive power. It is also used in the treatment of cattle disease.

41. (a) As a food digestive to persons who are stout, and puffed with air.

(b) It makes him senseless and thus makes him forget the pains.

(c) No.

(d) No.

It is the moderate habitual use that does good and is referred to above.

42. The moderate use of these drugs is harmless only when sufficient and rich meals are taken, mixed with much sweets.

43. Moderate consumers are inoffensive to their neighbours.

44. (a) Passiveness and loss of manly power are the immediate effects of the use.

(b) Yes.

(c) Yes.

(d) No, it does not allay hunger.

(e) Yes, it creates appetite.

(f) They last for about six hours.

(g) No.

(h) The want of subsequent gratification produces uneasiness of mind and the swelling of the belly.

45. (a) No.

(b) Yes. It reduces the body and makes him weak.

(c) It causes injury to the digestive powers of some and loss of appetite to others.

(d) It causes asthma and bronchitis.

(e) It does not impair the moral sense, induces laziness, and does not create habits of immorality or debauchery.

(f) No.

(g) No.

None.

46. The excessive use of these drugs causes great intoxication, and deprives him of any worldly knowledge.

47. It is not a hereditary habit among ordinary people, but hereditary among the sanyasis and fakirs. No; it does not affect the children of the moderate consumers.

48. The habitual excessive consumer has no family or anything, and consequently no hereditary habits.

49. (a) No.

(b) Yes; it produces impotence.

50. The same as in No. 48.

51. He becomes a coward, and does not commit crimes. He may go a-begging for the means to get the ganja when in want of means.

52. No crimes are connected with the excessive use of these drugs individually, but when they assemble in large numbers, they fall upon each other and thus commit crime.

53. Yes. A collection of the ganja consumers put together may lead to temporary frenzy.

54. No.

55. Yes. They can induce them, giving them the drugs mixed with other things. It completely stupefies without any admixture whatever.

56. (b) The effects of hemp are increased by admixing dhatura for personal consumption only, and not for administration to others.

57. I have no experience of the effects produced by eating or drinking charas and ganja.

58. The present system of excise administration in regard to hemp drugs is working well.

60. They are sufficiently controlled.

61. No charas is produced here.

62. No.

63. I have no objection to the present system of wholesale vend of ganja. If retail vend is brought to action, it increases the revenue.

64. No objections to the existing regulations. I suggest that if licenses should be given for cultivating these plants, it is advantageous, both to the improvement and downfall of the use of the drugs.

65. In my opinion a little increase in the taxation of ganja, etc., would be reasonable and proportionate.

66. No; the rate of taxation should be the same for all kinds of ganja, for, if it is different, people will have greater recourse to the one taxed less.

67. No objection to the present method of taxing ganja, etc.

68. There are shops licensed for the sale of these drugs. It is better that licenses should be given for shops for the preparation of the drugs where they may be consumed on the premises.

69. The wishes of the people are consulted before a shop is opened in any locality. The leading men of the place are collected and their opinion taken before it is opened. Yes; public opinion should be considered.

70. No.

135. Evidence of SAGI RAMA SASTRY, Brahmin, Inamdar and Native Doctor, Rajahmundry, Godavari District.

1. Being versed in native medicinal science and being myself a native doctor, I have occasion to know something about ganja.

3. I know only of the ganja that is sold in the bazars here. I do not know in what districts the drug is cultivated. It is sown only in back-yards of this district.

4. I know of two names: (1) leaf ganja (daligapodum), used for preparing bhang, and (2) kalli, flowering tops of ganja, used for smoking.

16. Bhang is prepared only in houses.

19. It is used also in medicines. It is used in preparing halwas. It is used for curing diarrhoea and dysentery. It is the complement of certain native tonics used for strengthening the sexual system.

20. I know only that gosains and bairagis smoke the drug, and not respectable men.

24. Men of all castes drink bhang. The proportion is 25 per cent.

25. The use of ganja has largely increased of late, the reasons being (1) desire to get intoxicated, and (2) ignorance and foolishness.

28. Each man consumes from $\frac{1}{4}$ tola to 1 tola

in accordance with his bodily strength and habit. Gosains smoke from 1 tola to 2 tolas in a day.

29. Dhatura is used to increase intoxication.

30. It is largely done in solitude in this part of the country. Men not of a respectable character use it in public company. Only males of all ages use it. Children do not use it.

31. (a) and (b) Yes.

(c) Certainly.

32. Generally speaking this habit is fostered in solitude, and continued in lonely places, and not publicly made use of. I do not know whether gosains connect the use of this drug with any religious principle.

33. It is very much despised. In these parts it is held in very low estimation, both in a social and religious point of view. I have never known of the ganja plant being held in veneration.

34. Yes, because they feel very uneasy without it.

35. (a) (b). Yes.

(f),—(a) Yes.

39. Smoking is more injurious than either eating or drinking it, causing the disease named spermatorrhoea (loss of semen).

40. We never know of its use by itself, but as a component in certain medicines. I do not know whether it is used for treatment of cattle diseases.

41. By a moderate use of the drug, the consumer feels pleasant and gets rid of cough, if he has any.

42. Yes, beneficial, used moderately. Even by intemperate use, no positive harm seems to be caused.

43. Yes.

44. It intoxicates him and takes away weariness, promotes appetite. I think the intoxication lasts for about 6 hours. It brings on constipation. It weakens a man and increases bile. It produces longing.

45. It will act as poison if in the habitual use of it intemperance is reached.

On heated constitutions it has the effect of weakening. On flabby constitutions it has a good effect. It dulls intelligence. The use of it retards the desire for sexual intercourse. It impairs the constitution by making the man lean. Increases digestion, removes dysentery and cough. It does not impair the moral sense. It induces laziness. By very intemperate use insanity is likely to come on.

47. No.

49. It promotes sexual strength by its being used in halwas. By smoking hemp too much, impotence will ensue.

51. Yes; no connection at all, the consumers being as a rule timid.

53. It does not at all excite. I do not know of any case, but it seems to lead to such an effect.

54 and 55. No.

136. *Evidence of MR. W. A. SYMONDS, Agent and Manager to the Lessees of Sivaganga Zamindari, Madura District.*

36. I have little doubt of it. The cause is the increased facility of supply, which has created demand. It is difficult to conjecture the precise nature of the proof demanded. Exact statistics, if they can be got, may furnish it, provided the facts underlying the figures are not obscured either by careless or too astute handling of the latter. By the abkari system, liquor has been brought to the doors of numbers who had before to traverse not inconsiderable distances for it, and this has been accomplished by the multiplication of shops which were formerly few and far between. Those who can believe that the admitted increase in abkari revenue has been accompanied by a decrease of consumption would believe anything. The plain truth is that the Government raises revenue to provide for luxuries, such as its prolonged annual residence at Ootacamund, and not merely to meet necessary expenses in governing the Madras Presidency, throughout which the number of drunkards who reel about the public roads of an evening has increased, and is increasing.

44. I have seen habitual consumers out of health and miserably depressed when the supply was suddenly cut off. I refer to prisoners in jails under my charge. I was the Superintendent of one Central Prison and another for twenty years.

53. I have known the mildest prisoners commit aggravated assaults on their fellow-prisoners and on prison officers when under the influence of these drugs, and I believe that my experience in this respect will be confirmed by every Superintendent of a large central jail of any considerable experience.

Oral Evidence.

1. I was in Government employ for more than 30 years in this presidency. My present post is not under Government. My service is closed, and I am drawing pension.

36. My answer does imply that the consumption of the hemp drug is on the decrease, and presumably, therefore, the cultivation and manufacture also. But I have no direct evidence of this. It is only deduced from the increase of alcohol consumption.

44. My answer is only based upon personal knowledge. I learnt from the doctors that the persons I refer to were ganja consumers. Once a week the Superintendent of the jail and Medical Officer hold a joint inspection, and it was on these occasions probably that the doctors mentioned the fact. Prisoners never dreamed of asking me for ganja, as it is a prohibited article. They did sometimes ask the dressers and the Medical Officer; but I am certain that a medical recommendation for ganja never was made. Such recommendations have been made for tobacco. What I have recorded of the effects of deprivation relates principally to opium; but I remember that the hemp drugs were also mentioned in that connection, though much less frequently than opium.

45. I should say that ganja was unquestionably doing more harm than alcohol or opium, and that opium was the least harmful of the three. By ganja, I mean the flowering head of the plant either smoked or eaten. I should think it was more harmful than opium-smoking; but I limited my written answers to three of the Commission's questions, because I thought they contained the only points on which I was qualified to speak. I have no special knowledge of the subject, except such as could be picked up by a Superintendent of a jail.

53. I can recollect assaults of the kind having been committed; but I cannot give the number of the cases that occurred. They occurred in every jail of which I have been in charge. The ganja must have been smuggled into the jail. I cannot remember the details of any single case as regards name, year, or date. The punishment registers probably mention ganja in some of these cases. In many cases, doubtless, punishment was awarded without the drug having been mentioned at all. I was never in charge of the Vellore Jail. In the cases in which these assaults could be with certainty attributed to ganja, the man's breath would smell of it, or ganja might be found on his person, or witnesses or jail officials might have seen him smoking. Prisoners might undoubtedly break out and commit violent assaults without being under the influence of narcotics.

137. *Evidence of MR. M. MALLAYYA, Manager, Kasim Kota Zamindari, Vizagapatam District.*

Oral evidence.

1. I am manager of the Kasim Kota zamindari estate. I have been managing for ten years, as the minor's father is my brother. I am forty years old. My caste is Brahman. I know the whole of this district and the Agency. This is the only district of which I have special knowledge.

The hemp plant grows wild in the Agency, but not the plain tracts. It is to be found near the houses and in the jungles too. Near the houses the plants are sown by the people, I should say. In my own village of Kasim Kota the plant grows in a number of compounds—ten, fifteen, or twenty-five or even fifty plants in a compound. I have seen these myself. The plants are in little clusters, not in ridges. I have seen them for two or three years. It is simply the ganja plants by themselves, not with tobacco or other crop. I have not observed them before three or four years ago. The owners are pensioned sepoys who grow them for their own use. I know no other village with so much cultivation.

I have not seen any village with so much. Even in Kasim Kota there are only eight or ten compounds. I think that it is ganja plants that are grown in these compounds. I have no doubt in my mind, though I only see them from the road.

I have been observing the effects of ganja on sanyasis who come about. I have seen them smoke. I have also seen some sepoys and some Brahmans use ganja. Agriculturists do not use the drugs. They are used also by idle persons without occupation in towns and villages. I think the drugs cause much injury. They keep men out of sense, and causes a delirium or intoxicating effect. I have seen such effects in bairagis. They smoke a lot of ganja. It makes a man red-eyed and stupid. This is excess. Every one who uses the drug except for medicine desires to be intoxicated; so he uses to excess. Native doctors use

it, I am told, medicinally in a balwa prepared for strengthening the system. I have seen the ill effects in the private servants that come to us for employment. It assists them, and in one way it is useful to make them strong; but, used to excess, it is injurious, and they use it so. There are 7,000 inhabitants in our town. I do not know the ganja-smokers. I have been told that such a man has become foolish by smoking ganja; but I know myself nothing of his habits. I believe myself that the drug is injurious. I base this on what I have seen of foreign labourers, my own servants, and my neighbours. I think the moderate use is not injurious. I had a Brahman cook that used ganja moderately. It did him no harm. I have known, however, very few moderate smokers. I cannot tell how many. I have also known few, but not very few, excessive smokers. Liquor is abundantly used in my part. I have observed very bad effects. The effects are, I think, worse than ganja, that is, the effects on the consumer are worse, and also the effects are worse on society generally.

Looking at the classes of persons who use the drug, at the effects of moderate and excessive use, and at the fact that liquor prevails so much more, there is no reason for Government interfering with ganja. The ganja is a smaller thing, a smaller evil. So long as liquor remains the hemp need not be touched. The idea of prohibiting both is out of the question.

If the benign Government passed strict orders prohibiting cultivation they would be effectual. They would be carried out in a short time. It would not be a hardship, for cultivation is very limited. The people who cultivate would feel it a great hardship. But Government is not bound to consult the people. I do not think that there would be any fuss or hubbub over it in connection with the action of preventive officers. The inquiry into cultivation would not be inquisitorial and harassing, because cultivation is not inside the house. A search for contraband stuff in the house is far more harassing.

138. *Evidence of M. R. RY. V. VENKATROYER, Brahman, Managar, Ettayapuram Estate, Tinnevely District.*

1. From enquiries held of those who were acquainted with the subject.

2. The term ganja is used to denote the dry leaves. Sadai ganja is the name given to flowering tops with resin. Charas is not known here.

4. The plant is also known by the name of "Kolaker-meilikai."

5. The plant grows in loamy and sandy soil, and it requires plenty of water or constant irrigation. It does not thrive in climates impregnated with soda.

6. Scattered.

7. The plant is cultivated to a very small extent for the production of ganja and seeds along with other crops, and the extent is quite insignificant.

8 No.

9. The plant is raised on the banks of irriga-

tion (field) channels, in garden lands lying under wells, along with chilly, brinjal and tobacco.

10. There are no special classes. Shanars generally cultivate garden crops and ganja, but they do not use the drug but sell to others.

15. When the plant is about six months' old, the plant with its leaves and flowers (with resin) is collected, pressed and dried and preserved in pots. For smoking, the drug is mixed with tobacco, and beaten and then used.

16. The drug is eaten by some without any preparation, and others mix it with honey, pepper, dried ginger, etc., and make it into balls. It is then called "puranathi lakiani." The powder is soaked in milk and then pressed and the juice drunk.

18. Yes. With ordinary care it is said to keep for six months, and it deteriorates and generates

worms by exposure to air and light after six months.

20. The lower order of Mahrattas and Pandaram-Parathasus smoke ganja of either sort (above given). The proportion of people using ganja is very insignificant and may not exceed 1 in 5,000.

21. Chur is used for smoking mixed with equal quantity of tobacco. Both are well washed and then used for smoking.

22. Both native and foreign ganja. Ganja is imported from Dharmapuri (Salem district) into this district.

23. Yes; in fact both bhang and ganja are used in smoking by the classes above named.

25. No increase or decrease to any appreciable extent.

28. (a) Half an anna weight of ganja, worth about six pies.

(b) One anna weight, and worth from 9 to 12 pies.

29. See under 15.

30. The purnathi above specified is consumed in solitude. Ganja is smoked generally in company, and it is confined to the male sex. Even

old people continue to use the drug. Children do not consume the drug.

32. No such social or religious custom prevails in this province.

33. The custom is regarded as degrading, and the user of ganja is not respected. The use is in disrepute, because the users lose their self-control, and become offensive to neighbours. There is no custom of worshipping the plant in this province.

35. The discontent cannot amount to a political danger. The prohibition may lead to the use of other intoxicating drugs or spirits.

38. Flat and chur only are used here, but no difference in effect is ascribed to them.

40. Native doctors sometimes prescribe the use of ganja preparation called purnathi-lakiam (see query 15) for those suffering from dyspepsia, dysentery, liver complaints, stomach ache and general debility.

43. The uses of purnathi confection are not offensive, but those using ganja always select secluded places.

58. It is working well in this province.

60. The production and use is so very small that it is better to leave matters as they are.

139. Evidence of BONDILI MOTIRAM, Cultivator, Cocanada, Godavari District.

1. I was formerly a medicine-maker, and so I can give information about the ganja plant and leaf.

2. Ganja does not grow spontaneously, except in wild tracts to a very limited extent, and in Kabul, Nepal and Punjab. It grows abundantly in Hyderabad.

14. Ganja is not prepared but is grown. Bhang is prepared here and there to a limited extent by those that desire to stimulate pleasure. Charas is not known here; nor does anybody know how to prepare it.

16. Bhang is prepared generally in houses and monasteries. It is prepared from the ganja plant wherever grown. The ganja plant grown on red and hard soil and rigor clay, is used for smoking. The plant grown here is not useful for making charas, but that grown in cold countries is useful for the same.

19. Ganja and charas are not only used for smoking, but also mixed in medicines. They eradicate *valam* and phlegm, and cure dysentery. It is generally mixed in medicines in all places.

20. Charas is not known here. All classes of people smoke ganja; and they form $\frac{1}{10}$ th of the population. This is prevalent in all localities.

24. Bhang is drunk by all classes of people to a very limited extent and in all localities.

25. The use of ganja and bhang is on the decrease, since the price has risen on account of taxation.

28. The average cost per diem for a habitual consumer is from 1 to 3 pies.

32. The use of ganja is not prohibited by any religious books; nor are the consumers offensive to their neighbours.

33. The use of ganja is not regarded by the public as prohibited, and the plant is not worshipped here.

39. Neither ganja nor its preparations are eaten by all except habitual consumers. It causes intoxication to those who are not habitual consumers. Smoking does not produce as much intoxication as eating.

40. Ganja leaf and its juice are used in medicines. As it is a drug, it may be used for cattle disease, but I cannot say for certain.

41. Ganja and bhang are used for bodily disease by some, and for intoxication by others. Certain diseases are being cured by their use.

43. Either moderate or excessive indulgence in the same does not make a man offensive to his neighbours; but it makes him a little intoxicated—not as much as arrack does.

44. It is used for dyspepsia, for soothing fatigue, and for curing bodily ailments. By its use the fatigue of journey will disappear; and though the excessive smoking does not make a man senseless, it produces a little intoxication. Its use, when hungry, allays hunger to a little extent. It creates appetite by curing dyspepsia. Its effects will last for nearly three hours. Its use will sharpen the intellect and makes the mind steady. Want of subsequent gratification produces longing for the same and uneasiness.

45. No.

49. It increases semen if taken by youthful persons and not by old people.

53. The use of ganja, etc., does not make a man senseless as arrack, etc., will do. So long as a man is under its influence, he will be a conscious speaker. I have not heard of anybody under its influence committing suicide.

54. No.

55. Criminals do not induce their victims to partake of any of these drugs, because it does not stupefy them.

140. *Evidence of LANKA KRISTNIENGAR, Vaishnava Brahmin, Chairman, Municipal Council, Srirangam, Trichinopoly District.*

1. I have given my answers from information got by me from persons who eat or smoke hemp drugs, and from native doctors.

3. I have not heard that hemp plant grows spontaneously in this district. It appears that it is imported from northern countries. I have seen a few ganja plants grown and reared up in Muhammadan mosques, and in flower gardens.

14. (a) Ganja is the dried flowering portion of the plant from which the gum or resin has not been removed.

(b) Charas is the resin or the gum removed from the leaves, stems and flowers.

(c) Bhang is the larger leaves and the covers of the seed or capsules.

All these are prepared in Trichinopoly and in Srirangam.

16. I am told that bhang is prepared with ganja, pepper and jaggery, in houses and sold in bazars in small balls, which the people buy and eat.

19. I have seen ganja used for smoking, but not the charas.

20. I have seen chiefly the bairagis who travel about the countries on pilgrimages from the north, and the religious mendicants, and also Muhammadans as a class smoke ganja freely and frequently, but not the charas.

24. I know and have personally seen a Smartha Brahmin (Sivite) eat ganja and a bairagi drink ganja prepared as follows:—

The Brahmin used to bring a pollum or 3 rupees weight of ganja, keep with it half the weight of pepper, and grind both well like wax and making it in two or three small balls eat it.

The bairagi used to boil 2 pollums weight of ganja in water, and, after washing it well, grind the boiled hemp of the ganja, and then dilute it in two seers of boiled cow-milk, and after straining it two or three times in a piece of thin cloth, mix some white sugar in it and then drink. The Brahmin and the bairagi both were doing so every day once.

25. I do not know.

28. I have heard that the average cost is between one and two annas per diem.

32. Socially and religiously the smoking or eating ganja and bhang in any form is condemned among the higher classes of Hindus, Brahmins especially.

33. Religious people treat the person using or eating ganja as immoral or impious, because it produces intoxication. I don't know, nor have I

heard, that any hemp plant is worshipped by any sect of people.

39. Smoking the hemp plant is said to be less injurious than drinking or eating the same in any other form; for eating or drinking of the ganja produces irritation in the stomach at times, and induces the person to repeat the dose to check the irritation.

40. There are several medical works in Tamil, Telugu and Sanskrit, in which the ganja is prescribed as a drug to be mixed up in confections prepared of various seeds and herbs, and bazar medicines to be given to increase appetite, to stop diarrhoea, and to give vitality to the nerves; and also in ointment prepared for bathing to check neuralgia. I have not read these books, but was told by native physicians. I have not heard that any of these drugs are used in treating cattle diseases.

41 and 42. The consumers of these drugs say that a moderate use of them is beneficial and harmless.

43. The bairagis and the religious mendicants who are moderate consumers of ganja have been, to my knowledge, quite harmless.

44. The habitual eater of ganja, the above said Smartha Brahmin, is to become cheerful after taking it. He has told me that it is refreshing. I have never found him intoxicated. He has said that the appetite is increased by it. After taking ganja he used to become jolly and begin singing Tamil songs, repeating Sanskrit slokams and telling witty and laughable stories to pass the time of his hearers. He will be doing this for two hours ceaselessly and then go to sleep. He will have six hours' sound sleep. He is to feel a great longing and uneasiness if he did not take ganja every day once. All these I have seen in person. One or two bairagis have told me that it allays the hunger, and they can live upon smoking alone ganja, once in an hour or two, without taking any meals for a whole day.

45. I have not heard that it produces noxious effects, either physical, mental or moral.

49. Yes; I have heard that it is used as an aphrodisiac. Chiefly the confection called Purnathi is made and given by native doctors for it.

51. I do not know.

53. I have not heard, nor do I know it.

54. I do not know.

55. I have heard that petty thieves or pick-pockets stupefy children with these drugs mixed up in sweetmeats, and entice them to lonely places and rob them of their ornaments and clothes.

141. *Evidence of MR. W. TAYLOR, Chairman, Municipal Council, Parlakimedi, Ganjam District.*

1. Twenty-six years residence in India. Inter-course with natives of India of all castes and classes.

3. In none. Cultivation is always necessary, as far as I can learn.

14. Yes, ganja everywhere in large quantities. Bhang in a few places only; but it can be generally purchased cheap.

16. Yes, by the people in their houses generally. Bhang can be prepared from the hemp plant wherever grown. Ganja only from the young buds which come at certain seasons.

19. Ganja is smoked, and used in many other forms and preparations as medicine.

20. Ganja is used moderately by about 10 per cent. of all classes of the people. But more

generally by bairagis, mendicants, and the poorer classes.

24. Bhang is more generally smoked than eaten or drunk. I believe that all consumers of ganja resort occasionally to bhang.

25. Opinions differ. I believe it is a fact that where good liquor (toddy or arrack) is obtainable, the consumption of ganja, etc., declines.

28. I am told the moderate consumer can satisfy his desires for about half an anna.

32. I am aware of none.

33. Public opinion is opposed to the consumption of these drugs, as even the moderate consumer is liable to indulge to excess.

39. I am unable to say; opinions are divided on this subject.

40. Yes; all the drugs are used in some form as medicines by all native doctors. They are used externally, in cattle diseases, sometimes.

41. Yes, ganja; as regards the others I cannot say.

42. It is generally recognized that the moderate use of these drugs is sometimes beneficial, and

generally harmless. The danger is of smoking or eating to excess. The moderate use of these drugs is considered a prophylactic against malarial fevers, and other diseases incidental to life in the Indian jungles.

43. Yes.

44. Slight intoxication, the spirits are raised, and the general tone more animated. It is refreshing, and though for the moment it allays hunger, it afterwards increases the appetite. How long the effect lasts depends much on the quantity taken, and the constitution of the consumer. Say a couple of hours generally. It is followed by a feeling of drowsiness.

45. Not in any instance that has come under my notice.

49. Yes; I am told there are two or three preparations from these drugs, prescribed for that purpose by those who pretend to know.

Note.—The members of the Municipal Council, all natives of the country, agree with me as to the general accuracy of these answers.

142. *Evidence of K. SUBBARAYADU PUNTALU, Brahmin, Chairman of the Adoni Municipal Council, Bellary District.*

1. These answers are based on information obtained from enquiries made for the purpose.

2. The only kinds in use here are ganja for smoking and bhang for drinking. Ganja goes here also by the names of siddi pattri and guana pattri. The definition of ganja may be accepted for this province. Charas is known here, but is not in use.

3. I have not seen any part where the plant grows spontaneously.

4. It is called the ganja and bhang plant, and both names refer to one and the same plant.

5 and 6. Not known.

7. Those accustomed to its use grow a few plants either in their fields or in back-yards for use as ganja or bhang. This kind of limited growth takes place wherever there are persons accustomed to its use, such as sanyasis, bairagis, and fakirs. I, however, saw once a field in a village (I remember Ayyavarikodur) of the Nandyal taluka of the Kurnool district actually cultivated with the ganja plant.

8. I have not noticed any considerable decrease or increase.

9. Not known.

10. There is no special class of persons cultivating it.

11 and 12. Not known.

13. The growth of the plant for use is not restricted.

14. I learn that the ganja used here is imported mainly from the Kistna and Kurnool districts.

15. Not known.

16. People accustomed to drink bhang prepare it themselves from the dry leaves in ganja. Nothing is known about the wild plant.

17. Generally by Muhammadan fakirs, bairagis, sanyasis, and other Hindus that use it.

18. Ganja well prepared and cured keeps with-

out deterioration for about a year at the most. Bhang made ready for drinking cannot be kept.

19. Ganja is used for smoking, and charas is not in use here. Bhang is made from the dry leaves of ganja.

20. All classes smoke ganja but not charas, which is not in use here. Perhaps one per cent. of the population use ganja in these parts.

21. Flat ganja is the kind in use here.

22. Not known.

23. Bhang is not used for smoking here.

24. Rajputs, Marhattas, bairagis, fakirs and Marwaris generally drink bhang here.

25. People say that, owing to the comparatively high prices of spirits, the use of ganja has been somewhat on the increase.

26. (a) Decimal eighty-five per cent. of population.

(b) Decimal ten per cent. of population.

(c) Decimal five per cent. of population.

(d) Decimal five per cent. of population.

27. Mainly Muhammadans. Soley or weaver class people and Marhatta people. In the midst of their labour, the working people now and then use it to find relief and get over fatigue.

28. Ganja.

(a) Half tola, price about 3 pies.

(b) Two tolas, price about 1 anna.

29. Not known.

30. Used both in solitude and in company. Ganja is used generally by males. Both males and females drink bhang. Children are not allowed to use either.

31. The habit is contracted generally by association, and, when once the habit is formed, it is difficult to break it off. The tendency for moderation to develop into excess is common only among the bairagis, fakirs, and other ascetic classes.

32. A person smoking ganja generally hands the pipe over to those happening to be about him, provided they are accustomed to smoke it. By bairagis, sanyasis and fakirs, ganja is smoked generally with a view to facilitate concentration of mind for divine contemplation. Labouring classes use it to find relief and kill fatigue. Beyond these there are no more customs here.

33. The consumption of ganja is looked down upon as a bad habit, except in the case of bairagis, sanyasis, and other religious ascetics. The hemp plant is not worshipped in these parts. The drinking of bhang is not generally in disrepute like ganja.

34. To those much addicted to use, such as fakirs, bairagis and sanyasis, it would be a serious privation to forego consumption of the drug.

35. As the number of consumers is comparatively very small here, the use of ganja may be prohibited by making its cultivation, preparation or possession penal; but even then there may be illicit consumption, at least to some extent. The prohibition may cause some discontent, but such discontent may not amount to political danger. The prohibition may be followed by recourse to alcoholic stimulants.

36. No; because this is cheaper than alcohol.

37. As already stated above, charas is not in use here.

38. Only the flat ganja is in use in these parts.

39. Smoking is said to be more harmful, because it affects the lungs.

40. Yes; but to a small extent. A paste of ganja is applied to sores. It seems to serve the purpose of carbolic acid. The tongues of cattle refusing to eat are rubbed over with powder made of ganja, saffron and salt. Ganja mixed with grain and pounded gives strength to cattle, and is believed to keep them in good condition.

41. Moderate use of ganja is believed to promote digestion in the beginning, to alleviate fatigue and to prevent diseases likely to arise by use of different waters. It is the moderate habitual use that is referred to here.

43. Yes.

44. The immediate effect of the moderate use of the drug on the habitual consumer is refreshing, and allays hunger. The effect is said to last from one to six hours. Want of subsequent gratification produces longing and uneasiness in the habitual consumer.

45. Habitual moderate use of the drug is said

not to produce any serious bad effects, physical, mental or moral, on the whole; but, compared to toddy, they say its effect in the long run cannot be said to be altogether good.

46. Habitual excessive use of the drug is said to produce bad effects, such as attenuation of body, forgetfulness, laziness, and impotence, and even insanity sometimes.

47 and 48. No.

49. Yes; When mixed with opium, etc., and used in the form of electuaries, ganja increases venereal desire. Moderate use of ganja is not supposed to produce impotence, although it slightly affects it.

51. No; it has no connection whatever with crime like alcohol. On the other hand, it has the reputation of making people quiet and timid.

53 to 55. No.

56 and 57. Not known.

58. There are two ganja shops in Adoni, and the right of selling ganja in them is sold for R180 in 1893-94. The low amount fetched is manifestly due to the fact that people grow the plant here and there for their own use without any restriction.

59. There would no doubt be increase in the revenue under this head if restriction be placed on people growing the plant and its growth made penal.

60. Ganja is not being regularly sown and cultivated in these parts in fields; but a few plants are being here and there put in by people accustomed to its use either in the yards of their houses or by the edges of their fields. There is at present no restriction or control on cultivation of the latter kind.

61. Charas is not being produced here.

63 and 64. I see no objection.

65. The taxation of ganja is reasonable. There is no separate taxation on bhang or charas here. Charas is not in use here, and bhang to be drunk is made from dry leaves picked from flat ganja.

66. There is only one kind of ganja (flat) in use here.

67 to 69. No.

70. The person who has purchased the right of selling ganja imports ganja into Adoni mainly from the Kistna and Kurnool districts. No cases of smuggling have come to notice; but there may be smuggling to a small extent at least by people using ganja grown in their yards, etc. It must be admitted that untaxed drug is also in use.

143. *Evidence of E. SUBRAMANA IYER, Brahmin, Chairman, Municipal Council, Conjevaram, Chingleput District.*

2. It is not grown in the Conjevaram Municipality, Chingleput district.

3 to 6. I have no knowledge of such places.

7. None in this town.

8 to 17. None.

18. I learn that the drug begins to lose its inherent quality when kept a month or so. It loses its quality gradually. It may be kept good for about six months with ordinary care. Evaporation causes its deterioration, but it may be kept safe for some time by wrapping it up in a wax-cloth and preserving it in a close case.

19. Ganja and charas are not only used for smoking, but also for the following purposes:—

They are also mixed in some confections. They are also ground into confection with milk and sugar and drunk in a liquid condition. Very few people use them here.

20. The use of ganja is not restricted to any particular class here. They smoke both of them indiscriminately here to the extent of five per mille all over the town.

21. Chur is preferred for smoking. If any other kind is made use of, it is on account of cheapness.

22. It is not imported here.
23. Bhang is also used for smoking. The use is not confined to any particular locality or to any particular class here. It is freely made use of by the Bairagi pilgrims.
24. It is both eaten and drunk by the few people that make use of the drug here.
25. It is on the increase now.
26. The few consumers in these parts are rather habitual moderate consumers.
27. The use is not restricted to any class. People make use of it more on account of its deadening effects on bodily ailments. It deprives them of the feelings of pain, keeps their spirits up while they are in a languid state.
28. It is one anna per day.
29. It is generally mixed here with an equal quantity of tobacco. Dhatura is not used here. Tobacco is mixed with it to season the effects of bhang. Bhang massala is also sold here. Its ingredients are not so well known.
30. Very few people practise it in solitude. It is generally confined to the male sex. It is not confined to any time of life. If once practised, the consumer is constrained to use it till the end of his life. It is not usual to make use of it with children, but they are sometimes mixed with country medicines in case of dysentery, etc.
31. It is easily formed. It is difficult to break it off afterwards. There is a little tendency for the habit to become excessive.
32. The use is not encouraged by any social or religious customs. It is not considered to be essential in any way; but, on the other hand, it is deprecated by the society in general and forbidden by religion.
33. *Vide* answer above. There is no plant to be worshipped here; but it is generally used as sacrifices to some of the minor Hindu deities.
34. Yes; no doubt it will be a serious privation to them, which may result in serious diseases.
35. It may not be feasible to prohibit the use of these drugs with the excessive consumers. There may be attempt to consume it illicitly. It may create discontent among some of the consumers, but not to such an extent as to apprehend any political danger. Alcoholic stimulants and other drugs are not considered to be good substitutes for the drugs in question. Consumers can in no way be satisfied with these in place of those drugs.
36. No; people do not change their drugs for liquors on account of the comparatively high price of the latter.
37. There is a difference between the effects of the two; but the former, which is very valuable, is not imported to this part of the country.
39. Smoking is less injurious than eating and drinking the drugs, as smoking is less intoxicating than the latter two.
40. The drug is also prescribed by the native doctors on account of its medicinal quality.
41. (a) It is used as a digestive thing.
(b) It cannot support a man under severe exposure.
(c) and (d) No.
42. No doubt it is harmful, though moderately used. It weakens the constitution by absorbing the blood in the system.
43. They are more or less unconscious, and hence inoffensive to their neighbours.
44. It is refreshing to a little extent. It also produces a little intoxication. It cannot allay hunger. It creates appetite in an hour and a half in the utmost. The consumer gets languid after that time.
45. Physically the man gets weaker when not properly nourished. Mentally he gets absent-minded; morally he becomes useless. It does impair. It injures the digestion and causes loss of appetite in the long run. It causes dysentery, bronchitis or asthma when not properly nourished. It does so. No doubt it deadens the intellect, but does not lead to insanity.
- 47 and 48. No.
- 49 and 50. Both the moderate and the excessive use of the drug may tend to produce impotence ultimately.
53. It does not incite to such crime, violent or otherwise.
54. No.
- 60 and 61. It is not produced in this town.
68. There is only one shop licensed for the sale of ganja.

144. *Evidence of* RUNGO SRINIVASA RAO, *Brahmin, Chairman, Union Panchayat, Madakasira, Anantpur District.*

1. Local knowledge.
3. I know not much of any district.
14. (a) ganja. (c) bhang.
Madakasira taluka. Moderate.
16. (a) Yes.
(b) Not known.
(c) Not known in these parts.
19. Yes. They are also mixed with spices, made into pills, and taken every morning and evening.
20. Fakirs and Boyas, etc., lower class. In places where no other intoxicating drugs are available.
24. *Vide* reply to Question 20.
25. It is increasing. Some are under the impression that they will be relieved of the pains in the joints, etc., if they take this.
28. One tola, 6 pies.
32. Not known.
33. The practice is held as bad. Many object to take this. Not known. None worship in these parts.
39. Not known.
40. To a certain extent by native doctors. Not known.
41. Yes. It depends upon the nature of the constitution.
42. *Vide* reply to Question 41.
43. Yes.

- 44 (b) It is refreshing.
 (c) and (d). Yes.
 (e) It creates appetite.
 (f) Three hours.
 (g) Yes. Headache and uneasiness of mind.
 (h) Yes.

45. It affects both physically and mentally.
 49. Not known.
 51. To a certain extent. Not known.
 53. Not known.
 54. No.
 55. Not known. Yes.

145. *Evidence of the REV. H. J. GOFFIN,* Missionary, Kadiri, Cuddapah District.*

1. Have lived in South India 15 years. A ganja shop is within half a mile of my door.

2. The only two names by which the article is known here (Kadiri) are bangi-aku or bangi-leaf and ganja. The small twigs with leaves and flowers are sold in small bundles by the growers to the shopkeeper, who strips off the flowers and suitable leaves for sale as ganja. The terms flat, round, and broken are not in use.

3. Nowhere.

7. Yes, as above described.

Particulars can be obtained from Government office.

8. Some increase probably due to the action of Government in licensing the sale of it. Taxing the article puts a higher price on it, and makes it more worth while to grow it.

10. No special class. The ordinary raiyat puts a few seeds into his garden, and so makes a few rupees extra.

17. The ganja of the district is not prepared by any special class, though perhaps Muhammadans chiefly do it. Any one may set up the shop by taking out the license.

19. In Kadiri, ganja is used for smoking only.

20. No particular class of ganja smokers can be designated, except that they are mostly of the poor and lower classes. Fakirs or religious mendicants also are much addicted to its use.

21. See Question No. 2.

25. Slightly on the increase.

See Question 8.

29. The only ordinary mixture with ganja is a little tobacco, and this is used because the ganja is damp with the water which has been employed to prepare it for smoking, and the tobacco helps to dry it.

30. There is very little solitude about a Hindu's practice of anything. He smokes his ganja anywhere and at any time. Its use by children and females is unknown. Generally speaking, the middle-aged and old use it most.

31. I think the habit of smoking ganja may be easily contracted, and broken off without much difficulty. Of course, it is the tendency of the use of all such narcotics to become excessive.

32. None. The religious mendicants, who use it largely, do so probably (1) because they are a lazy, bad class of men; (2) because it helps them to bear the hardships of their peculiar kind of life; and (3) because the half-crazy, imbecile demeanour it produces is not unfavourably regarded by the people.

33. It is generally looked down upon as disreputable for the reason that its effects are bad. There is no worship of the plant amongst the people here.

34. No doubt excessive consumers would feel

the deprivation very much, but they form an insignificant fraction of the people.

35. Quite feasible. No doubt the drug would be consumed illicitly, and no doubt also the prohibition would be followed by a slight increase of alcoholic stimulants; and specially of opium. I do not think there would be any danger politically in prohibiting its use, but its enforcement would be difficult.

36. No.

41. Doctors should be able to say.

43. Yes. Some who practise the habit say that they do so in preference to taking alcoholic stimulants, because the latter makes them noisy and quarrelsome, whereas the ganja only has the effect of making them dreamily contented with everything.

44. A slight intoxication, during which the ills of life, hunger included, are forgotten. The after-effects are, of course, lassitude and weakness, and the desire to renew the indulgence is considerable. It is said, however, that after a short time of dyspeptic trouble, the desire passes away, and the habit may be broken off without great difficulty.

45. Most certainly the effects are injurious in every way, more especially, I think, mentally. The digestion becomes impaired and the body more or less emaciated, but its ill effects are chiefly seen in the peculiar imbecility which it produces—an unsteadiness of mind which is its chief characteristic.

46. Excessive use results in the same symptoms in an intensified form. Not unfrequently death is said to speedily follow excessive indulgence.

49. One instance of such use was brought to my notice. A native drug seller sold pills composed of ganja and some other drugs for such purposes.

51. The religious mendicants, who are notorious bad characters, always use more or less of this drug (ganja).

53. I should say it would, though I have heard of no specific instances.

55. I am told that a stupefying confection is made with ganja and jagri, which may be used for criminal purposes. It is sold in Cuddapah under the name of majum.

58. I cannot undertake to criticise the present or any system of excise administration. My own impression is that with regard to the growth and manufacture of these drugs, the Government would be wise to adopt a strictly "let alone" policy, leaving it to the spread of education and enlightenment amongst the people to prevent and lessen all ill effects. The province of Government (especially of a paternally despotic Government as ours of India necessarily is) should be carefully to watch such effects, and, wherever and whenever necessary, interfere with prohibitive legislation. Such necessity, however, in my opinion, would not often recur.

* Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

146. *Evidence of the REV. J. DESIGACHARI, Missionary, Society for the Propagation of the Gospel, Badvel, Cuddapah District.*

1. I have enquired from the planters and eaters of hemp drug. I lived several years in Burma and Arakan and in Badvel for the last two years among Muhammadans who are habituated to this vice.
2. Female hemp plant is only known in this province as ganja or bhang plant.
3. Hemp plant is generally grown in the Kurnool District and in Hyderabad and the Mysore Dominion.
4. It is known here only as ganja or bhang leaves.
5. Black cotton-soil, and red soil, which contains more of fatty soil.
6. It is dense in the Kurnool District and scattered in the Cuddapah District.
7. Yes.
(a) and (d) Yes.
In Cumbum Taluka chiefly, and in Chagalmurthy and Jammala Maduga Talukas.
8. There would have been more increase, had it not been for the restriction of the abkari rules.
9. The ground is well tilled and manured, and then seed is sown, and a heap of straw is covered over the seeds, so that the moist may continue till the plant springs up.
10. No, they do not form a special class. Yes.
11. Yes.
12. Yes. Under the pasture of black hills in the Kurnool and a part of the Cuddapah District. No, the male plant is not extirpated.
13. Yes, in all districts. The cultivation is common where the majority of the people are Muhammadans. Yes; black cotton soil. Rain-fall is extreme in Ceded Districts. Here hemp plant is spontaneously grown.
14. Ganja is prepared in different ways. Some use it in the shape of balls or cakes after mixing spices very richly. Some prepare it in the shape of liquid, adding spices and sweet things, chiefly jaggery. It is also prepared in the shape of sticky stuff, hot and sweet mixed together. It is used also in the shape of powder.
15. Generally in houses, and chiefly in secluded places where lazy Muhammadans assemble for idle talk.
16. Generally by Muhammadans.
17. No. If kept closed, lasts very long; and the more it becomes older the more it becomes stronger and intoxicating. If kept carelessly, it loses its effects and becomes deteriorated.
18. Ganja is used only for smoking, but is also usually taken internally in the shape of pills easily swallowable.
19. Muhammadans chiefly and Sudras, of lower orders, i.e., lazy men.
20. Round ganja is preferred for smoking.
21. Bhang also is used for smoking in pipes. They smoke till they get quite stupefied, say about 15 minutes.
22. Majority of Muhammadans of Southern India and some class of Bairagis in the North-Western Provinces and Calcutta eat bhang.
23. It is on the increase.
24. (a) 3.
(c) 1.
25. Hard-working class of people, labourers, boatmen, and jutka-drivers. Those who cannot afford to spend money on liquors are compelled to go in for these. Smoking these drugs induces more intoxication than valuable liquors.
26. To induce intoxication majum is generally used. Two marble-sizes are quite enough, which costs only two pies each. Purnathi is another kind of preparation. Three pies worth is quite enough to induce intoxication. Majum with a very small proportion of bhang is used medinally.
27. Ghec and sugar. No, I do not know of any bhang massala.
28. It is mainly confined to the male sex. No, children are not given these stuffs for fear of being poisoned, except when it is very carefully prepared by experienced physicians.
29. It is very easy to contract these habits. It is very difficult to break off these habits when one is addicted to it.
30. There is neither social nor religious custom in consuming these drugs. Such customs are considered to be of a very mean sort that a man could acquire. It is injurious to the health. One that is addicted to these habits loses appetite, virtue, colour of the body, and his face gradually turns quite pale.
31. Regarded by all classes to be a very mean and bad habit. Such men's company is avoided both publicly and privately. During the month of August, the hilly tribes worship the hemp plant.
32. Muhammadans predominate, Hindus are next.
33. Even if proper steps are taken, it may not be feasible. Though there is a strict law prohibiting the cultivation of hemp plant, yet there are breaches. The prohibition may cause serious discontent among the consumers, and won't amount to any political danger.
34. Alcohol can't be substituted.
35. All have similar effects.
36. Smoking is certainly less injurious than consumption. In smoking pure plant made into a size of a cake balled, but in drinking and eating different ingredients are mixed which lessen the power of the stuff.
37. Native doctors prescribe purnathi for dysentery, indigestion, and diabetes, and it is occasionally given for restlessness to children in a very small quantity to give them good rest. When purnathi is taken in a very small quantity, it is, I am of opinion, very efficacious.
38. Certainly it is not at all beneficial.
39. Quiet and inoffensive.
40. The immediate effect is that it gives them rest and pleasure and satisfies hunger. It is refreshing indeed. It does produce a very little intoxication. It can't be the real intoxication in its proper sense. It does not create appetite. The effect lasts not more than an hour or two. Subsequent want is very greatly felt without it. One that uses the drug behaves worse than a mad man.

45. (a) Yes, physically, mentally, and morally too.

(b) Yes.

(c) Does not interfere.

(d) No.

(e) After reaction sets in, it must induce.

(f) It does deaden the intellect. Produces a mild form of insanity.

(g) I can't say.

47. Not at all a hereditary habit, but does affect children's health. As far as my experience goes, I can confidently testify that the children of such men are generally very weak and sickly.

49. By enquiry I understand that prostitutes do indulge in these habits.

51. Yes; the proportion is very large.

53. They do commit very violent crimes.

55. Yes.

58. As there is no authority prohibiting possession and transport without permission, the excise system or administration does not work well, and there is no probability of improvement also, and the people have ample opportunity to dispose them off.

60. The cultivation of the ganja-bearing plant is not at all under any control. I would strongly propose such a control is quite necessary. Requires thorough modification.

62. Though there be a strict law prohibiting the production of hemp plant, I do not think it will be possible to prevent the production. Though not publicly but secretly people would plant.

63. If possible, I would advocate total abolition.

64. Now the existing Government rules do not prohibit the possession of ganja or any other drugs by any body. Any body can manufacture and keep any quantity in stock. There must be a special law prohibiting the manufacture by all, and only men who possess a license should be allowed to manufacture. Any one can transport it without any trouble, and generally the manufacturers sell at their own quarters without license. There must be a definite law bearing on the subject.

65. The present tax is not at all reasonable.

66. Yes, certainly there should be different rates of taxation.

68. There are shops only in two places in this taluka, but no sale, as the drugs could be had at a lower rate at the manufacturers'. These shops sustain great losses.

69. No, the wishes of the people are not consulted. To consult the local public not necessary.

N.B.—Intoxicating stuff out of hemp, *Cannabis indica* is unknown as ganja. In my opinion, founded upon actual observation, it is ganja and not opium that is doing most mischief in this country. I believe ganja is more insidious in its effects than opium. Victims to ganja-smoking have been frequently known to fall into a chronic state of mental aberration. Opium, on the contrary when used and not abused, represents the poor man's *materia medica*, and I have no hesitation in saying that it has kept alive and in health and vigour many who, but for its aid, would have been in their graves long ago. Many regard it as a panacea for all the ills the flesh is heir to, and are ready to back it against the contents of a

whole medicine chest. It is even considered a prophylactic against epidemics. Its effects in these parts are on the whole beneficial. Opium smoking is unknown here. Even the practice, when not carried to excess, is hardly more injurious than the use of tobacco. Opium-smoking Chinese are more industrious. Ganja is used in many ways. It is smoked in a chillum, made into sweetmeats, such as majum and halva, and sometimes the beverage known as bhang. Immediate effects are said to be indescribable, the smoker, eater, or drinker, as the case may be, falling into a blissful state, seeing visions and dreaming dreams of the most ecstatic nature, and yet the gradual effects, as mentioned above, are said to be very mischievous, as must be expected after such unusual mental excitement.

Oral evidence.

1. I have been years in the Cuddapah District. I have itinerated in two talukas of the district out of eleven, and in one taluka of the Kurnool district. I began to make enquiries a month or two ago before receiving the list of questions, and I spent about a month upon them. The majority of the eaters and smokers are Muhammadans. My residence was of necessity in their quarters, because I was not allowed to live among my Hindu caste-fellows. My chief informer was a Muhammadan carpenter who lived next door to me; but I enquired of others whom I suspected from their appearance to be users of the hemp drugs, though they did not admit it. The Muhammadan smokes and drinks the hemp drugs, takes opium, and drinks arrack also.

45. My answer relates to the moderate as well as the excessive use. I have some actual knowledge as well as a general impression on the subject. I did distinguish in my enquiries between the moderate and excessive use, though it does not appear in my answers. I should now attribute the bad effects described in this answer to the excessive and not to the moderate use. Moderate consumers do not become insane; but they are not capable of doing work. They wander about and do not show attachment to their families. The moderate use generally ends in the excessive use. I have seen some 20 consumers, who are idlers, and always ready to smoke and drink; and these are the people from whom my impressions of the effects of moderate use are derived. These persons frequent a building attached to a mosque in Badvel, and their drink is "paraka," a mild intoxicant prepared with a small quantity of ganja. I could recognise a moderate smoker of ganja, even though I did not see him smoke, by the redness of his eyes and a certain stiffness of gait.

I cannot say what quantity of ganja or bhang represents moderate consumption.

47. The consumers of the hemp drugs generally have no issue. My impression that the children of consumers are weak and sick, is general; but it is also based on observation of particular cases, for I have noticed that excessive smokers either have no issue or weakly children. I have not made similar observation regarding moderate smokers. The only moderate smokers I know are those I have mentioned under question 1. I can only recall one excessive smoker, and I have known him for 3 years. He had three children, who are all weak and sickly. They are all three grown up. Three children were born, etc., people say, before the father smoked excessively. He is now about

5 years of age. My opinion that excessive smokers do not have children is based on hearsay.

53. The answer is based only upon hearsay, not personal experience.

65. I understand the present tax is very small; but I don't know exactly what it is. The tax is not high enough.

68. By manufacturers, I mean anybody and everybody who chooses to grow the plant.

In my note comparing ganja and opium, I refer

to the eating of opium and not the smoking of it. I do not know anything about the smoking of opium. My remark about the harmlessness of opium smoking is not based on experience. I know some opium eaters, and they are not so mischievous as ganja smokers. The ganja smokers I have described are idlers, it is true; but they are mischievous also; in that people are afraid to pass them at night. Idlers of any sort might be offensive; but the idleness of these men results from their habit of ganja smoking.

147. *Evidence of the* REV. W. ROBINSON, *Missionary, London Missionary Society, Salem.*

1. I have seen ganja smokers at intervals in the last 16 years.

3. In Salem, on the Yelagiri hills, and the Javadis. These hills are in the Tripatore Taluka, and this ganja is considered the best. I have seen the plant growing wild in many parts of the district. It is abundant.

14. Ganja and bhang are prepared by the people themselves.

16. Ganja in the rough state is sold in the bazar. The people prepare it for consumption themselves. Ganja can be, and is, prepared from the wild plant. Coolies on coffee estates grow it and prepare it.

19. Ganja is used in the way described below:—

Preparations of ganja for eating:—

(i) Green ganja leaves are ground on a curry stone, mixed with pepper and ginger. This mixture is made into pills, and the pills are eaten.

(ii) Dried ganja leaves are powdered and mixed with powdered rose leaves, poppy seeds, cardamoms, ginger, and pepper. These are beaten to a powder. Coconut milk and water with sliced plantains are added to the powder and made into a paste. This paste is eaten little by little for several days. This is the mode of consumption preferred by well-to-do people.

20. Religious mendicants, fakirs, Muham-madans. The proportion is not known; but I should think all fakirs use it.

32. It (ganja) is used in the Kama festival (the Holi festival) in South India. It is ground with milk and sugar and eaten by men and women.

The Sattanis use it when they worship devils. They put the juice into the food they eat. Sakti-worshippers, both men and women, use it extensively.

33. There has been from time immemorial a strong public opinion against it. It is wholly in disrepute.

In the "Tanvanthiri wisdom," stanzas 492-493, disciples for Yogam are told—"Hemp smoking will increase bile, destroy the brain, and cause consumption."

In Tiravullavar's Guna Seth, stanza 859, candidates for the state of Yogam are ordered to reject utterly "opium, ganja, and liquor;" they are urged to use milk, rice, and green gram. Matralangi, the great ascetic, also urges his followers not to take ganja, liquor and opium. In the Nunthi Sar Gunnam, the 100th poem, sloka 2, are

the words—"If one wishes to take a disciple, let the disciple be examined a hundred times * * * If he is addicted to ganja, toddy or other liquor, he must be forthwith rejected, and the master must see him no more."

It must be noted that these lines are by Tamil poets, who lived more than a thousand years ago.

40. Yes; for inducing sleep and allaying pain.

41. No.

42. I have known cases where ganja has been taken in the form of a pill every night. In each case the drug had a cumulative effect. A most awful kind of dyspepsia was the result, and the patient, after enduring torture for some time, just died with startling suddenness. I have seen three cases like this the last two years. The men referred to had taken ganja moderately for years.

43. Moderate consumers whom I have known have generally taken a ganja pill at night. Beyond being very irascible, I do not think they were offensive.

44. The pill produces instant exhilaration, in fact intoxicates; the effect passes in the course of two or three hours. The after-effects are shown in bad temper if provoked.

45. I have seen fakirs and others ruined by ganja smoking. There is a notorious instance in Salem of a man who, through ganja smoking, has a vitiated appetite. He eats filthy things, and is an awful object lesson on the abuse of ganja.

The effect I have observed in other cases is that of imbecility or rather besottedness, mentally and physically, great emaciation, a staggering walk, staring look, and sunken bloodshot eyes. The moral perceptions do not exist in these cases.

51. I should say 75 per cent. bad characters use these drugs in some form. In certain cases the drug inflames men's passions and drives them to deeds of violence, but these are not numerous.

Oral evidence.

1. I have been in three districts in the presidency, and for the last thirteen years in Salem. My experience is therefore drawn principally from Salem. I have watched ganja smokers as an itinerating missionary, travelling 180 days a year through the villages, examining schools, and preaching in bazars. Some ten years ago an old bairagi came to me and desired to become a Christian. When we attempted to teach him, he forgot one day what we had told him on the previous day. When the people heard he was frequenting our

society, they ill-treated and abused him, throwing his cooking pots and other property out of his house. He showed no resentment or temper at this. He seemed to be utterly indifferent about it. This was what first drew my special attention to the hemp drugs. I could not understand his forgetfulness of our instruction and his extraordinary indifference. On enquiry I learnt he was in the habit of taking legiam, i.e., either majum or puranathi. Legiam is defined in the Tamil Dictionary as first licking, second lambative, third an electuary. There are three kinds of legiam, an opium legiam, a ganja legiam, and an opium-cum-ganja legiam. I cannot say which of these three the above-mentioned bairagi used to take. My impression is that he would take all three. He was not a ganja smoker. I have seen five persons who are lunatics, though not dangerous, wandering about in Salem who have been pointed out to me as object lessons in the abuse of ganja smoking. I have not seen them smoke myself. There are five other persons whom I have myself seen smoking ganja and whom I knew well. Two of them I cannot now trace, as they left the district. The third, a Muhammadan, died some years ago. I believe the other two are in the district, but I have not seen them for the last two years. I had known them before for various periods, in some cases up to ten years. The effects of the ganja habit upon them were redness of eyes, a drawn expression of face, and a sleepy and sometimes angry look. The habit appears to me to be an extremely ruinous one. I regarded the above five men as ruined. They were incapable of any continuity of thought. My experience of the effects of ganja smoking is based on my observation of these five men. One was a Muhammadan, one a bairagi; the other three belonged to the inferior castes. The last three had evidently been discarded by their caste-fellows on account of their vile habit, and they could not or would not tell their own caste. They had no occupation. The Muhammadan was in charge of a rest-house or chatram. Without calling them "wrecks," I can say that all five were entirely disabled from conducting the ordinary business of life. I cannot say how long they had been smoking or how much they were in the habit of smoking. These are the only cases of ganja smoking with which I am personally acquainted. I do not know whether these men took spirits, but think not, because they were habitually quiet. I do not think they took opium, because they could not have afforded it.

3. I have seen the plant growing wild on the boundaries of fields. I have seen it growing in such places in the hedges, and on manure heaps near houses. I don't know that it grows in the jungles. On the boundaries of fields and manure heaps it may have been planted. In the only cases with which I am acquainted, except one to be hereafter mentioned, it was planted by horse-keepers, servants of Europeans. I have heard it is grown behind native houses, but I have not seen it. I was once walking with an old Tamil man in Sankaridrug, and he plucked the plant from waste land along the side of the road. It is of the growth in the hedgerows that I speak principally in my answer to question 3. At Sankaridrug there may have been a sparsely scattered growth over several acres. I saw the plant on the Shevaroy hills also; once in a garden when it was growing very abundantly, having spread from a plant experimentally cultivated by Dr. Short, who had botanical tastes; once on manure heaps on the estate of a planter; and I

heard of it also, as being cultivated in the coolies' lines of another planter. I cannot say to what extent it was growing in the last place, but I was told there was a good deal of it. It was growing thickly in Dr. Short's garden on an area about as big as this room, but I heard it was growing abundantly on other parts of the garden which forms part of an estate of 140 acres. It is two or three years since I was first able to identify the plant. I am singularly deficient in the power of differentiating plants, but the smell of the hemp plant is well known to me.

32. The equivalent of the word "devils" is "Thushtar devaigal" which means evil deities who require to be appeased. The whole of my written answer to this question is based on hearsay and reading.

33. The passage containing the mention of ganja and opium in the work of Pathamanjali is taken from a Tamil version of the Sanskrit, for the correctness of which I will not vouch.

42. The cases mentioned in this answer I had known for years. I visited the men during their last illnesses, and then ascertained that they had been in the habit of taking ganja in "legiam." The legiam may have been of any one of the three kinds described under question 1. I made persistent efforts to discover what the drug used had really been, but failed. Previous to the last illness, there was nothing specially noticeable in the appearance or manner of any of them except extreme irritability in one man, who was 65 years old. This man could keep nothing on his stomach. He had been a drunkard. The other two did not drink. I give these cases as instances of the fatal effects of long continued but extremely moderate use of the drug. I used the word "cumulative," because a native friend of mine who practises the Tamil system of medicine, on my expressing surprise at the sudden collapse of these men used a Tamil expression, of which the literal translation is "because he has taken it for many years that medicine inside in plenty too much." This man is well educated in Tamil literature, but knows nothing of English medicine. He pointed out to me that death was the result of the continued use of the drug, and the above expression is his explanation of the way in which the result came about; but I am not in a position to say whether he was right or wrong. In one case it was a relation living in the house, and in the other cases it was neighbours and relations living outside who gave me the information that the men had been taking legiam.

43 and 44. The pill referred to in these answers is the legiam.

45. The man referred to in this answer is one of the five lunatics mentioned in my first answer. I know nothing of the case myself. It was pointed out to me as a case of lunacy resulting from ganja.

The second part of answer 45 refers to cases which I have seen in the course of my travels in the district of persons who had the symptoms described. I have asked about them and been told that they were ganja smokers.

51. One of the cases, on which my answer that ganja drives people to violence is based, occurred about ten years ago. A man shot his neighbours, and was tried, and, I believe, executed for it. People said that the deed was committed under the excitement of ganja. I have heard people quarrelling, and been informed that they were

under the influence of ganja and liquor. The violent people are generally those who take both ganja and liquor.

59. I think the control of the hemp drugs is part of a very much larger question, viz., the restriction by Government of all poisonous drugs in the Indian bazars. I think Government

ought to prohibit the use of ganja except for medicinal purposes. I think ganja is very much worse than alcohol, because the five men whom I have mentioned above presented a much worse appearance the morning after a bout of smoking ganja than the drinker does after indulgence in his liquor.

148. *Evidence of the REV. W. H. CAMPBELL, Missionary, London Missionary Society, Cuddapah.*

1. I have lived in the Cuddapah District for nine years and have spent the greater part of my time in going from village to village visiting and teaching the people. I have come into personal contact with all classes of society, and have not only seen a good deal of the effects of the hemp drugs, but have made very careful inquiries about them of consumers and of others.

2. Yes. The name bhang is commonly applied to all the various productions of the hemp plant by the Telugu people. Muhammadans distinguish between ganja and bhang, but only a few of them know the word charas, as the drug is not commonly used here. The ganja produced and used in this district is broken ganja, and it is spoken of simply as ganja or bhang. Flat ganja is sometimes imported, but it is not, so far as I have been able to ascertain, distinguished by any special name.

3. I can only speak of the Cuddapah District. I have never met with the wild plant here, nor, though I have made special inquiries, have I ever heard of its occurrence.

7. The hemp plant is cultivated in almost every part of this district for the production of ganja. Charas is not produced in the district, and, although bhang is sometimes used, the plant cannot be said to be grown for its production. The plant is never grown here for the sake of the fibre or seeds. The cultivation for the production of ganja is pretty extensive. In addition to the growth for sale, the plant is grown for private use in almost every village. Consumers rear a few plants in a garden or back yard, and gather and preserve the ganja for themselves.

8. I cannot give a direct answer, but refer to question 25 where I shall deal with the consumption of ganja.

9. Hemp is grown in gardens watered by irrigation from channels or wells. It is a five months' crop. As the plants begin to flower a careful inspection is made and all the male flowers are destroyed. When the female plants are in full flower, the leaves are removed and the stems with the flowering tops are cut, tied in bundles and taken to market.

10. In this district hemp is cultivated by all classes.

13. In this district the cultivation of hemp is unrestricted. I have found the plant in almost every part of the district, but it grows best in the higher ground. It can be cultivated anywhere in the district.

14. Ganja is prepared in large quantities in this district, but production of charas is unknown. In the few cases in which charas is known and used, it is specially procured from Madras. Bhang can hardly be said to be produced, as it is rarely used and is not commonly sold.

15. After the flower heads have been separated from the stem, they are carefully and repeatedly washed until the water comes away without any discolouration. The heads are then crushed together and sold in this broken state. The flat ganja is not produced here.

(b) For eating ganja is mixed with treacle and sold in mass. When used in curry the ordinary broken ganja is used.

(c) For drinking the ordinary ganja is made into a powder.

16. Where bhang is used it is prepared by the people in their own houses.

17. There is no particular class concerned in the preparation of the drug. It is prepared either by cultivators or by consumers.

18. Ganja does not deteriorate by keeping. The people say it will keep for any length of time, if preserved from damp. If damp attacks it, it becomes mouldy and loses its strength. As there is a very considerable illicit sale of ganja, Government statistics will hardly show the real extent of the trade.

19. Ganja is used for eating and drinking as well as for smoking.

(1) It is powdered, mixed with water, and drunk.

(2) It is mixed with treacle (jaggery) and eaten. This is common among the Kshatriyas and other higher classes, who would not like to be seen smoking the drug.

(3) It is put into curry, especially brain curry. This is common at funeral ceremonies amongst various Sudra castes.

(4) It is pounded and pressed into meat, especially such pieces as the heart or liver, and the whole is roasted and eaten. Though smoking is the principal form of consumption, devotees of the drug like to use it in every possible way.

20. Ganja is used not in one locality, but generally throughout the district. It is, I think, more freely used in the black-cotton soil talukas than in any other part. It is very largely used by Muhammadans. All classes of Sudras, agricultural and artisan, use it; so do the low classes, such as Waddes, Mala and Madigas. Its use is almost universal among the wandering classes, such as fakirs and beggars.

21. Chur or broken ganja is the kind commonly used. The flat ganja is imported, but the people prefer the other. Some smokers say that the flat is too heating.

22. Charas is not sold here. What is used is procured from Madras by consumers.

23. Bhang is occasionally used for smoking by the poorer classes on account of its cheapness. They can generally get it for nothing, but only resort to it when they have no money to buy ganja.

24. If bhang is eaten or drunk, it is only in very rare and exceptional cases.

25. All the older people state that the use of ganja is on the increase. They say that this is due to the restrictions on the production and sale of alcohol. Formerly the private distillation of arrack from the bark of the babul tree was very common, and in consequence liquor could be procured at a very small cost. Now that the price of alcoholic liquors has risen so largely, very many, it is said, are abandoning alcohol for the cheaper drug. A man can get drunk for quarter to half an anna, if he uses ganja; it will cost him ten times as much if he resorts to alcoholic liquors.

26. I could hardly answer decidedly, but I should think the following proportion about right, so far as this district is concerned :—

	Per cent.
Occasional moderate consumers	. 10
Habitual excessive consumers	. 10
Habitual moderate consumers	. 30
Habitual consumers who occasionally go to excess	. 50
Occasional excessive consumers	. rare.

27. All classes are occasional moderate consumers and habitual moderate consumers. Excessive consumers I have found in almost all classes, but they are most numerous among the fakirs and beggars.

28. (a) About $\frac{1}{16}$ th of a seer, costing $\frac{1}{4}$ to $\frac{1}{2}$ an anna.

(b) From quarter of a seer upwards, costing from 2 to 4 annas. Ganja costs 8 or 10 annas a seer, if purchased in a licensed shop, but can be had for 4 annas a seer in the gardens where it is grown.

29. Tobacco is commonly mixed with ganja for smoking. I have never known dhatura to be so used. No, I do not know of any bhang massala.

30. Generally in company. There is a sort of freemasonry among ganja smokers, and they usually club together to purchase the drug and consume it in company. I have never heard of a woman using these drugs, but lads sometimes begin to use them at the age of 15 or 16.

31. The habit is easily formed, though at first if one indulges immoderately, the effects are unpleasant and the consumer is troubled by dizziness, vomiting and diarrhoea; when the habit is once formed it is extremely difficult to break it off. If the drug is given up, the man suffers great distress for about a month, and is dull, restless and incapable of work. After a month has passed, this passes away. The moderate habit inevitably tends to develop into the excessive, as a consumer must go on increasing the quantity as his system becomes habituated to the drug, if he is to obtain satisfaction.

32. Ganja is frequently used in curry at funeral feasts, but it is not essential. It is also used at times in the *goshli*, or secret feast of the Ramana sect, but is not by any means essential. Adherents of the *Brahmagyani* and other mystical sects are much addicted to the use of ganja. This use is not regarded as a religious ceremony, but those

given to it believe that the intoxication produced by the drug enables them to obtain a vision of divine things. They call ganja gnana patra (wisdom's leaf) and describe those addicted to it as *gnannan* (wise men). I have had a poor dull looking creature pointed out to me as a *gnanni*. The use of ganja in this way always tends to excess as the desired experience cannot be obtained unless there is a considerable amount of intoxication. A good many men, I believe, become addicted to ganja through joining such sects.

33. The use of ganja is generally regarded as disreputable. I don't know of any religious sentiment on the subject, but there is a strong feeling against the drug. People generally recognise the injurious effects of the drug on the moral and intellectual as well as on the physical nature of those who use it and condemn it accordingly. I have not been able to discover the existence of any custom of worshipping the hemp plant, but smokers commonly do reverence to the drug by a simple salutation or prostration before they begin to smoke, just as women bow before a lamp on lighting it in the evening.

34. For some time consumers would feel it a very severe privation if deprived of the drug, with occasional consumers there would not be much difficulty, but habitual consumers, whether moderate or excessive, would undoubtedly suffer considerably for some time. After a month or two months however had passed, they would no longer need the unnatural stimulus, and before long would recover their natural vigour.

35. Yes, if the cultivation of the plant were strictly prohibited. The plant cannot be grown in secret, and if its cultivation were declared illegal, the use of the drug would almost cease. The evil can be met with in no other way, for so long as the cultivation of the drug is permitted its illicit consumption is easy. At present, although only about a dozen shops are licensed for the sale of the drug in this district, it can be bought at any garden where it is grown, and in very many places can be purchased in non-licensed shops. If the cultivation of the plant were prohibited, there would undoubtedly be a good deal of grumbling among consumers, but public opinion is so strong against the drug that such prohibition would be most popular with the great majority of the people. There would be no possibility of political danger. Possibly consumers would take to alcohol or opium if deprived of the drug, but the very much greater cost would certainly be a great deterrent, and in most cases would necessarily restrict them to a moderate occasional use of these drugs.

36. Certainly not in this district. The tendency is, as I have pointed out in reply to question 25, exactly the reverse.

37. I know nothing of charas smoking, as it does not prevail in this district.

38. All consumers whom I have asked say that the eating or drinking of ganja is much worse than the smoking, as they tend to produce madness and frenzy.

40. By no particular school, so far as I know, but the people occasionally use ganja under the impression that it will cure rheumatism, bronchitis, asthma, etc. I have met several ganja smokers who have told me that they began to use the drugs as a cure for rheumatism. Ganja is sometimes applied externally to sores and protrusion of the anus in children.

I don't know of the hemp drugs being used in the treatment of cattle disease, but when cattle

are restive and refuse to permit themselves to be milked, ganja is sometimes given to stupefy them in order that they may become accustomed to being milked.

41. The use of hemp drugs is always pernicious. It is not a food-accessory or a digestive, but on the contrary injures the digestive organs by interfering with their natural healthy action. It undoubtedly prevents hunger and fatigue being felt at the time, but at the expense of a very severe reaction. A moderate consumer of ganja is not capable of the same fatigue and endurance as a non-consumer of the same physique. I have never heard of ganja keeping off fever. Here ganja smokers are at least as liable to malarial fever as any others.

42. I consider the moderate use of these drugs to be distinctly harmful. There is in the first place an almost inevitable tendency toward excess in all who use the drug. Use creates appetite, and habitual use necessitates a gradual increase in the amount of the drug used in order to produce satisfaction. In the second place, the action of the drugs is in itself injurious to the digestive and nervous systems, and through these to the intellectual and moral nature of the consumer.

43. As a rule moderate smokers are inoffensive to their neighbours, but they are generally regarded as untrustworthy. No one would think of trusting a ganja smoker or of accepting his word on any matter of importance.

44. The habitual consumer certainly feels refreshed and invigorated by the moderate use of the drug. Until he uses it he feels restless and uncomfortable, and the idea of exertion of any kind is distasteful to him. When he has had his smoke he feels at rest and is ready to begin his work. A small quantity of the drug will not produce intoxication in a habitual consumer, and consequently such a one is always tempted to indulge to excess in order to experience the pleasant effects of intoxication. Habitual consumers as a rule use the drug three times a day as they say they cannot remain longer without it. The effect may thus be supposed to last about three hours when the after-effects begin; and when these become distinctly distressing, the man must again resort to the drug. The after-effects are very distinct. They are excessive lassitude and an accompanying irritability, headache and giddiness, and an uneasy gnawing sensation in the stomach. If the drug is not speedily resorted to, the symptoms become very much more pronounced.

45. The use of ganja certainly injures the digestive organs and causes a lack of appetite. Many smokers have told me that they didn't care whether they got their food or not if only they could get their supply of ganja. A young man named Philip, a teacher in a school under my charge, had his constitution completely ruined by indulging in ganja smoking for about a month or six weeks. His digestion was destroyed and some time he had no appetite and felt repulsion at the sight of food. After he had been given strong purgatives, this to a great extent disappeared. When I saw the young man, which was about a fortnight after his illness commenced, he was very weak and trembled and started from time to time. He seemed unable to look steadily at an object for any time and could not answer my questions intelligently. His mind was permanently affected and he has never since been able to do any work. So far as I could find out he had not used the drug for more than six weeks and had never gone to any great excess. The moderate use of

the drug certainly impairs the moral sense and makes a man lazy and useless. When the people speak of a man as "a ganja man," they mean a lazy, good-for-nothing fellow who cannot be trusted. I know a great many ganja smokers, and I believe hardly one of them is capable of distinguishing between truth and falsehood in the narration of an occurrence. As a rule ganja smokers work spasmodically and fitfully and are incapable of prolonged exertion. I have not met any cases of persons who have taken to hemp to obtain relief from brain disease, nor of insanity disposing people to indulge in these drugs.

46. There can be no question of the effect of the habitual excessive use of ganja. I have met with a considerable number of persons who have become insane through such use. In about half of those the insanity was of the dull idiotic type, in half of the active excitable type. One man Shantayya, a village servant, and elder in the Christian congregation in the village of Anamalgutti, some five years ago began to use ganja in large quantities. Before that he had been a hard-working honest man, but in a few months his character became entirely changed. He stopped work, began to indulge in petty thefts, and before long was put in gaol for attempted arson. His mind has been permanently affected, and he is now wandering from place to place an excitable madman, begging and stealing in order to get a supply of the drug.

47. Not to my knowledge.

48. I do not know of this use. The use of hemp certainly tends to produce impotence. Consumers admit this and lament it bitterly. "That's the plague of it," they have told me. In questioning people on this, I have not distinguished between the moderate and excessive use, but some of those who admitted the fact were moderate consumers.

51. Most of the lazy disreputable characters in the villages used ganja.

The ganja habit, by making a man unfit for regular work and weakening his moral sense, certainly helps to increase crime.

59. The cultivation must be dealt with, not the sale, if Government wishes to lessen the evils connected with the use of these drugs. Under the present system consumers can freely cultivate for private use. They can also purchase the drug without difficulty at the gardens or even in unlicensed shops. Ganja can easily be concealed, and its illicit sale is consequently hard to detect.

60. The hemp drugs are in no way useful or beneficial. Their action is decidedly injurious, and the effects of their use are wholly bad. I am strongly in favour of the total prohibition of the cultivation of the plant and the production and sale of the drug. I believe such a measure would command the assent of the great majority of the people. The small quantities of the drug needed for strictly medical purposes might be produced in Government gardens and sold under careful restrictions as, say, arsenic is sold in England.

62. See No. 60.

63. All these drugs are dangerous poisons and ought to be sold as such poisons are sold in England.

65. The taxation of ganja is certainly not reasonable in reference to alcohol, as the less dangerous and less hurtful alcohol is made very much more costly than the wholly injurious ganja. As

I have said before, it costs ten times as much to get drunk on alcohol as on ganja.

68. I believe not in this district.

69. No, I do not see the use of consulting local public opinion on such a question. Though public opinion is decidedly against the use of the hemp drugs, it is doubtful if the majority of the people would take the trouble to express any opinion on the subject, while consumers of the drugs would certainly try to show that opinion was in favour of opening such shops. If the drugs are bad and are doing distinct harm, it is a matter of very small consequence whether the people of a certain locality wish or do not wish to have them prohibited.

70. There is a very general use of untaxed ganja. It can be purchased in unlicensed shops in many villages and in almost every garden where it is grown and it is very largely grown and produced for private use.

Oral evidence.

1. The whole of my residence in India has been spent in the Cuddapah district. We have about 10,000 Christians in the Cuddapah district, all Pariahs, except about 5, and the hemp drugs have often come up in discipline cases. Cases of insanity and grave breach of discipline have occurred among the Christians. I did not make the hemp drugs a special study; but I have had to enquire about them in connection with the cases referred to above. I have made special enquiries since getting the Commission's questions. I have had two years' training in medicine, and have had to deal with cases of disease brought on by indulgence in the drugs.

7. The hemp plant is cultivated in three or four places in fields, but I have not seen such cultivation. I have seen the plants mixed with other cultivation, such as chillies. I have never seen more than 200 plants together. I have seen it growing in backyards and gardens in many places. The plant cannot be mistaken when once recognised. This kind of cultivation prevails in the whole district; but I have observed it to a less extent in the sub-division in the south-west of the district, where I have not travelled so much as in other parts. The plant grows about 5 feet high.

15. I have not seen the crop prepared; but growers who were also consumers have described the process to me. Two Muhammadans in Cuddapah and others were my informants. The process I have described may not be quite accurate. The word "used" might be substituted for "sold," and the meaning will then be clear.

24. In this answer I have spoken of blangas distinguished from ganja in the technical senses used in the Commission's questions. The use of ganja for eating and drinking is described under question 19. Majum has not come under my personal observation; but I have heard that a good many of the higher classes use it.

28. I speak of the Madras seer. I don't know precisely how much it is in English weight.

35. There are eight licensed shops in the whole district. Consumers have told me that it is sold in gardens, and on one occasion I pointed out an illicit shop to a preventive officer who came to me begging for information. I have frequently been told of unlicensed shops where the drug can be purchased. The preventive officer asked me, because the Collector had blamed him for neglect of duty in consequence of my having reported the existence of

unlicensed shops. This was the only case in which I gave definite information, and then I only named the bazar where the shop was to be found. I have never had the name of such a shopkeeper reported to me.

45. Philip was a Pariah Christian. I learnt from himself and the villagers whom he taught that he only used the drug moderately. He did not drink to my knowledge. He was of good character before he took to the hemp, but somewhat lazy. He was not of strong constitution. I did not know any member of his family, except a brother and an uncle, who were strong, and the former of whom was of good character. I used to visit the village, 50 miles from Cuddapah, where the men worked, three times a year. On one occasion he neglected to come up to one of our centres for his pay; and when I was travelling near the village a short time afterwards, the villagers brought him to me. There are three or four habitual moderate consumers in the same village. They are Pariahs and Christians, and I know them personally. They taught him the use of the drugs. One of them is at present in jail for house-breaking, and I am not certain that another is not also in prison. They are men of bad character, and I have cut them off from the congregation. They drink liquor at times, as almost all the low classes do. It was from the testimony of the neighbours that I came to the conclusion that he had indulged very moderately. I dismissed him from the congregation. He was a fairly well educated lad of 25. I have no doubt that I have diagnosed the case correctly as due to hemp drugs. All my knowledge of his character was gathered from the information of the villagers, the reports of our evangelist, and the state of his school. I could get no evidence of his having been addicted to the habit before. He lived in a quarter of the village which is inhabited by Pariah Christians. The man was never reported to me before he was brought to me by the villagers as having gone mad. I enquired the cause and found it was ganja. That is the first question I should ask in any case of insanity. If answered in the affirmative, I should conclude that the insanity was in all probability due to ganja. Before arriving at this conclusion, I should make other enquiries as to the man's family, as to his other habits, and as to the time he had been using the drug. If I got information of heredity as well as the ganja habit, I should probably conclude there had been a predisposition, which had been brought on by the ganja. The man always looked poor, weak, and underfed, and that is why I believed it possible that the habit should have brought him to insanity in so short a time. I knew his uncle and brother alone of the family. I probably enquired about his father, but I can't be certain. I have not heard of him for about a year; but I believe he is now supported by his brother. The man became useless four years ago, and is still in a semi-idiotic state, unable to do any work and inclined to wander about. This is the only case in which I attribute insanity to the moderate use.

So far as I have seen, ganja consumers are inclined to do things by fits and starts. We have no dooly-bearers in any district, and I know of no class who smoke ganja as a class and work like other people. There are, however, individuals who consume the drugs in moderation and work steadily.

46. I have made careful enquiry regarding these cases of insanity. I could name some 14 men, who, as far as I could ascertain, have become insane from the excessive use of ganja. If I set myself down

to do it, I could name many more. I can only recall at this moment four cases of insanity brought on by other causes than ganja. With effort I could recall more. No doubt I have been thinking about ganja lately, and the cases due to that cause are therefore more present to my mind; but I don't think I could possibly recall more than six or seven cases into which I have enquired, which were due to other causes than ganja. Five of the 10 ganja cases, which include the two mentioned in my paper, occurred among Christians, and into these I made careful enquiry; in the other five cases I simply asked the neighbours generally. I have not treated any of these cases medically. In two cases the insanes came to my notice as being violent; two others were middle-aged, and their insanity was rather of the idiotic type. They were pointed out to me as wise men, perhaps in jest. Having ascertained the ganja habit, I proceeded to

make further enquiry as to other causes of insanity in the cases of the Native Christians and in some of the other cases also. The enquiries I made were whether the insane was all right before he took to the ganja habit, and how long he had used the drug. I cannot remember having made enquiry about heredity in any case. So far as my memory goes, I made enquiry regarding heredity in one case. Heredity would be only one predisposing cause. I do not think I ascertained the absence of other exciting causes in a strictly medical sense; but I have enquired of the man and his friends, if anything had happened to him to unhinge his mind. The reason why I made enquiry into other causes besides ganja is that I was anxious to ascertain if the drug was so harmful as it was generally supposed to be. I am a total abstainer, and we have a temperance association in our mission to which I belong.

149. Evidence of the REV. S. J. LONG, Missionary, Coimbatore.

1. I have recently made careful enquiries from ganja cultivators in their gardens, sellers in their shops, and consumers in chattrams and elsewhere. Out of the nine shops opened for 1893-94 in this district (Coimbatore), I have visited four with a permit from the Collector.

I have visited about a score of smokers and have conversed, in some cases on more than one occasion, with ten of them. I have done so with the direct intention of getting evidence for the Commission.

2. The parts and productions of the hemp plant sold in this district are, as far as I could tell, the flowering heads of the female plant *either* separate (a), and unbroken (b), broken (c), or as dust, *or else* pressed together in cakes about one-third inch thick. These cakes are called javathu. There are also three or four electuaries made from similar flowering heads.

Although I cannot speak certainly, I think the sale of the leaves of the male plant is not usual here. It may be the leaves are mixed up with the flowering heads, but the several specimens I brought all seemed to me to be 'heads' in one or other of the conditions which I have mentioned.

There is no charas for sale in any shop I visited. The name was unknown; also the names siddhi, subji, patti and chur were practically unknown. The following names are in use in this district:—

Ganja thul=ganja dust.
Ganja podi=ganja powder. } The same.

Kali ganja=separate sprouts of ganja, not broken—probably from verb kali "to sprout" and to distinguish whole ganja from powder or dust.

Nattu ganja=country ganja, local growth.

Koth-thumali ganja=a variety of ganja with special smell. Not grown locally (?)

Sadai ganja=ordinary female ganja that has come or is coming to state suitable for use in smoking, etc. Sadai=entangled or matted locks—a ganja head looks like matted hair.

Karun ganja=black ganja, said to be stronger, perhaps the variety of the ganja plant having black stems; grown here as well as the white stemmed ganja.

Ilai ganja=leaf ganja, male plant (?)

Pukkanga=flower ganja, plants gone to flower, useless, but, if used, injurious; very bad for eyes if this be smoked.

Javathu=ganja heads compressed into a thick cake; generally said to be from Vellore, and stronger than country ganja.

The ganja as sold is commonly called ganja or bangi. The latter term is not perhaps quite so common as the former, but is frequently used and well understood. I wish to lay emphasis on this, because it is often stated that bhang is only a liquid preparation. Thus the Commission seems to regard it; while in Government returns for this district it includes all drugs made from the hemp plant. The sellers have to give returns under two heads, "ganja" and "bhanga." Under the former, they give the sales of the ganja plant for smoking purposes; under the latter (and quite incorrectly), they give the sales of various electuaries made from the ganja plant. Bhang in Government local returns does not specially signify a liquid, nor does it mean ganja as sold for smoking, as etymologically it might properly do; but it is used for these electuaries alone. The sellers are hopelessly confused in dividing their sales into sales of ganja and bhang as Government requires. Some assert that bhang is a name applied to the leaves of the male plant. That is not my experience of this district at all. Bangi is occasionally used for the plant and all its products interchangeably with the term ganja. Winslow's Tamil Dictionary gives "Bangi (foreign)=The ganja plant—Eng. bhang."

One man only told me bhang was a liquid; two others, on being asked, admitted that there is a liquid called bhang made with milk, also a preparation of ganja with eggs for eating; but from all I learned there is no doubt in my mind that the usual custom in this district is to use the flower heads of ganja for smoking, and the same heads are used in making various electuaries, and unless in my remarks throughout my answer I say something distinctly to the contrary, it should be borne in mind that I allude to this common custom.

The following are the electuaries prepared from the ganja plant and probably sold nearly as much as the ganja which is sold for smoking:—

- (1) Ganja majium or masium or masanum.
This is the common form of the drug.
- (2) White majium, a preparation as a medicine for children.
- (3) Puranathi or puranathi legiam.
- (4) Mathana Kamesuram

- (5) Tathupushti
- (6) Kulk-kanthupathami
- (7) Bilvathi

Nos. 1 and 3 were said to be the same by one seller, and No. 7 to be much the same. Nos. 3 and 7 were said to be the same by another seller. Nos. 4 and 5 said to be the same and not very intoxicating and with some 160 ingredients. No. 6 not very intoxicating and is used by respectable men. Nos. 4 and 5 as their names imply are to increase or strengthen seminal secretions. Legiam seems to be a common name for all these electuaries—(Sanskrit) licking “a lambative;” some however assert that legrani is itself a different preparation. Probably the name of the whole class gets applied to one or other of the preparations where only one or two preparations are sold.

There is also a preparation called ganja roti which I have not seen. It is made in their houses by the consumers.

3. It will grow anywhere in this district apparently. I have seen it growing in eight places. I was generally told that it grew spontaneously. There are usually some half dozen shrubs together. In one place I saw about 30. In this place it appeared to be cultivated.

4. The prevalent name is ganja chedi. It is sometimes called bhang.

7. I am told that some seven miles north of Pollachi the plant is cultivated for production of ganja for smoking and for preparation of electuaries.

9. I know nothing about this other than that fowl manure is sometimes used for plants grown privately, ox manure is also good. Plants are twisted three or four times during growth to prevent too much growth and to strengthen the resinous character of the plant. In two cases I was told that the plant has no special season—“neither day nor star” (nalumillai natchatthiramilai)—and needed about 10 months to ripen. Several assert, however, that the plant has its own seasons, that it ripens in January. It grows chiefly along the borders of land where there is chilly, tobacco, or brinjaw; not in the middle of these things, or it would injure them.

10. They do not form a special class in this district.

13. There is no restriction on cultivation, transport or manufacture.

14. Please see my answer to question No. 2.

15. As far as I can tell there is but one method of cultivation here, and that is to obtain the plant to be used for smoking or to make confections. I believe there is no difference as to cultivating one plant for smoking and another for confections. When grown, as partly described in answer No. 9, the plant is cut down, larger leaves are stripped off. Remainder is dried, then put in the dew, then dried and put in the dew again two or three times. Then put in sacks and pressed with heavy stones until it is in the right state to sell.

16. Not usually. I saw one pilgrim preparing some by picking off the big leaves. He said he should dry it and be able to use it after a month's time.

I visited a Muhammadan's garden where ganja was grown from seed for his own consumption. The gardener said the Muhammadan would come and take fresh ganja and smoke it there and then. It is not good to use fresh ganja, it should be dried naturally or over the fire. One sanyasi I saw had

been to a garden and begged some ganja which he prepared by pulling off the big leaves. He said he should dry it and keep it for a month before using.

Old ganja is preferred to newer. I heard one purchaser say “give me good *olu* stuff.”

Those who have ganja shrubs growing in their gardens seem usually to give ganja to sanyasis, but one of the latter said that now there is hesitation on account of this Government enquiry

17. No special class.

18. Ganja is said to deteriorate from damp and to lose its power after a year. It seemed to be kept loose in sacks in the shops.

NOTE.—Please note carefully my answer to question 2.

19. Ganja is apparently used only for smoking unless made up into confections (*i.e.*, electuaries). I heard that some ‘might’ prepare it with milk for drinking and with eggs for eating. But I came across no such case. Charas seems not to be used or even known in this district.

20. Any one of any class who falls into the habit. I have known a Brahman and a Muhammadan smoke ganja. Fakirs and sanyasis invariably use ganja for smoking, but their wives do not. It is exceptional to find a female using ganja. I only came across two who did so.

21. Podi or thul, kali, javathu—see answer No. 2. Not improbably, the first is what the Commissioners ask about as ‘chur,’ the second may be ‘round,’ and javathu may be ‘flat,’ but I cannot say with any certainty. Of the three kinds mentioned javathu would be preferred first, then kali, then podi or thul.

23. Please see my answer to question 2.

27. Ganja smokers appear to be *mainly* fakirs and sanyasis and to have derived the habit of smoking from their fathers. Of the smokers I saw, seven told me their fathers had smoked, but only one that his mother did so. As a rule these men beg and do no work whatever, some say they have never done a day's work. They wander from place to place. They say they have smoked from the age of 10 or 12. I saw two boys said to be 8 and 12 (and who looked not more) smoking. One man said he smoked when he was 5. Smokers invariably told me their mothers and wives did not smoke. The mother of one smoker was with him and he said she smoked. She declined the pipe in my presence, though he and others took it including her two boys of 8 and 12. Sellers of ganja also told me they sell very little to women.

Smokers are mostly married and having one or two children.

29. One man told me that dhatura was sometimes mixed in ganja by the sellers to increase the intoxicating properties, but by-standers tried to hush him up. A ganja smoker told me he took dhatura. I had not, however, much talk with either of these men.

30. Ganja smoking seems commonly to be performed in company. (The eating of electuaries is generally in solitude.) The pipe is passed from mouth to mouth. Smoking is almost solely confined to the male sex—see answers 20 and 27. It is confined to that “time of life” which a smoker has left to him. I saw no old ganja smoker. One man told me that if a smoker had in the ordinary course of nature twenty years to live, he would live ten. As to age of smokers see answer 27.

31. The habit of smoking is easily formed and difficult to leave.

A respectable young man (a Mudeliar), who had given way to the habit, told me that for a month he was ill after giving it up. He fell sick, had pain in stomach, bowels were irregular, sleep and appetite were bad. He has given up the habit for a year past, but still has a craving if he sees others smoke. He took to smoking a small cheroot called pidi, in order to break off the habit of ganja smoking; ganja smokers deprived of the pipe become weak and helpless. One man said he could not give it up, and if he was unable to get ganja in one town he would go to another. The practice of smoking invariably leads to excess. The Mudeliar referred to said emphatically smokers smoke in order to get intoxicated, ganja is a cheap and hence a popular intoxicant.

33. The smoking of ganja and the eating of majium, etc., are considered *bad*. Undoubtedly this is the general opinion in this district. The reason is that the custom of using these things weakens the consumer physically and morally.

One man, I spoke to, said that if he had a friend enslaved to ganja consumption he would recommend him to take spirits and so substitute that habit as less serious. The Mudeliar referred to in answer 31 was regarded by his friends as falling into a depraved state, and so he regarded himself and left the habit.

Two smokers, when asked, told me they would be glad to give up the habit. Both said they would not persuade others to adopt it. One man said: "my boy may perhaps follow my example, or he may take me as a warning"; others admitted the habit was bad, but they said how could they give it up. If they had plenty of food they might, but they could not work; they would get pain in their backs by working. Others, to whom I spoke (a sugarcane grower's son and a salt-maker), said it was against their caste customs to smoke, and that the habit was bad. I asked some smokers: "will you get other young men to smoke?" They at once replied: "we would not ruin others (mattavargalai kedukka mattom)." I did not at all suggest the idea of ruin. Winslow's Tamil Dictionary gives ganjagottri as meaning "a worthless person" (gottri *lit.* = a young calf). The fact that the sellers of ganja do not use it goes to shew that the use is bad. They and other respectable men were somewhat indignant at my asking if they used ganja.

I have not heard that the hemp plant is worshipped, but it seems that ganja powder is burned as a sort of incense before certain idols. It is said to be offered to Mathurai veeran, Karu-annasami Munniappan, Karuparayan Aiyasswami and a swami at Palni. It is also offered in the form of ganja roti (= ganja bread) which is made in the houses, taken to the temple and eaten. This is said to be offered by pilgrims to the swami at Palni. A gnani named Corakkar is said to have used ganja and to have given his name to the plant (*viz.*, Corakkar Kar-mulikkai).

The power of extinguishing sensual and wordly desire is attributed to the plant when smoked. It enables the smoker to concentrate his thought for meditation.

Appendix 3 contains a piece of poetry on the use of ganja taken from "Kudiyer Sinthu." The book treats of the use of toddy, tobacco and ganja—see page 6. There is another song book on ganja called Kannerivu Malai which I have not been able to obtain.

One smoker quoted "ganja Sivabaththiri, pukai ilai Brahmabaththiri," *i.e.*, "ganja is Siva's leaf. Tobacco is Brahma's leaf." I could not learn that ganja was called "the lock of Siva," though as sadai means entangled locks, it may be so called as well as Sivabaththiri (= leaf of Siva).

34. I presume it would be a serious privation, but I gather that even many smokers would approve such action.

35. One man who was familiar with the preparation and use of ganja, although not himself consuming it, said that restriction would be just as feasible in regard to cultivation of ganja as to cultivation of opium. No doubt there would be illicit growth and consumption, but it would probably be slight. I do not think the prohibition in this district would occasion serious discontent or amount to a political danger.

Resort in many cases would be more frequent to alcohol or to other drugs. I learnt that most ganja smokers use spirits, toddy, opium or some electuary composed partly of ganja.

39. The smoking of ganja is said to be much more injurious than the eating of ganja confections. It should be remembered that the smoke is swallowed, not merely drawn into the mouth. Smoking destroys the appetite and decreases seminal secretions even from the first. It results in impotence. The use of majium, etc., has the same effect in the end, but at first it greatly increases the appetite. It is used for this purpose and as a digestive. It is a strong aphrodisiac and is used to that end. Several men asserted that they smoked to remove hunger and to give staying-power. One man, who said he would give it up if he had plenty of food, said he took $\frac{1}{4}$ measure of rice daily. The young Mudaliar I have referred to said he used not to eat in the evening while he indulged the habit of ganja smoking. A ganja smoker will not feel stirred up to be aggressive. Rather than fight he will bear blows quietly. Smokers give little trouble at chatrams, they become fearful rather than fearless, but for a time they have great staying-power and can lift heavy weights or run long distances. Pilgrims going to Palni from Malabar, some 60 miles, move along with great swiftiness and go many miles; they say smoking ganja helps them. They do not all take ganja; sanyasis when begging will gash themselves severely on the arm or neck and scarcely feel the pain; this is due to their practice of smoking ganja. I have seen numberless scars of gashes on the neck or arm of a man.

40. The Dharma Vaitthya Salai at Pollachi is a medical institution where *only* native medicines are used. The proprietor's son who was in charge told me that only once during the last year or so had they administered ganja. That was in a case of dysentery, and effects being bad, it was discontinued.

A native who practises medicine occasionally told me that in bad purging or dysentery ganja heads would be given. They would be mixed with other herbs and sugar. The medicine is known as murungapulegim. To children "white legiam" or "baly legiam" (Kuranthai majium) is given. Ganja is also given for loss of appetite—see also answer No. 39.

Ganja enters into various medicines for regulating the semen. There is a popular medical work based on Augstyar called Athmarad samiratham ennum vaitthiya sarasankirakam by Ayulvéthapasha Karanganthasami Mudeliar.

This work mentions ganja as entering into recipes for,—

1. Thathu pushti legiam
2. Mathana kamesura legiam
3. ditto kulikai
4. ditto oil
5. Mathana purana valvathi
6. Mathana purana sanjeevi.

41. Referring to the occasional moderate use as a medicine—

- (a) Majium may be useful thus.
- (b) Ganja-smoking would probably be useful thus.
- (c) I have never heard any form of ganja alluded to as a febrifuge.

It would, however, be very dangerous to go to majium or ganja-smoking for (a) and (b), as the habit might insidiously be formed; moreover the effects are not easily regulated.

42. No, I think the use harmful. I judge from prevalent opinion of all classes whom I have consulted. I don't know any moderate consumer: smokers smoke in order to get intoxicated.

43. I believe they are inoffensive.

46. See answers 33 and 39, where I think I have alluded to all the points in this question which I can answer. As regards laziness, see 27. As regards insanity I cannot speak, but to all the previous questions under No. 46 I should say 'yes.'

48. See answer to No. 27.

50. See the medicines mentioned in answer 40. The names alone partly answer question 50. Winslow's Tamil Dictionary gives under ganja legiam—an inebriating electuary made of ganja and taken to promote venery.

A man who had been in the army told me it was a common thing for soldiers to take ganja preparations (electuaries) just before visiting prostitutes. Ganja preparations are certainly used as aphrodisiacs. I could not however learn that they were so used by prostitutes. According to common consent the use of ganja tends to produce impotence, though not at first in the case of electuaries.

56. See 39. Majium is ganja mixed with other things, and in 39 I have mentioned how its effects differ from ganja smoking.

Admixture of other substances with ganja.—One maker of majium gave me the following as the principal ingredients: Sukku, milaku, thippili, pattai, kirambu, jathikkai, jathibatthiri, thatkolam, thalibatthiri, mathanakāmappu, sutthimathuram, sirunakapu, marahmuk, jadāmanji, elakkay, akalakkāram, gauja, valimilaku, ganjachedi, ghee, honey, jaggery.

To make the majium, the ganja head has the seeds removed; it is then well washed and dried and mixed with above substances and some others.

Another maker said the chief ingredients of majium are ganja, black vellam, plantain, virām fruit, but there are some 30 other ingredients.

The chief ingredients of white majium, bilvathi,

javathu, thathupushti, and ganja roti, were said to be as follows:—

White majium.	Bilvathi.	Javathu.	Thathupushti.	Ganja roti.
Ganja mixed with angar, Jathikkay, Jathibatthiri, Elarisi, Marattimokku, Mathanakāmappu, Kirambu, Ganja.	Cleaned ganja sutthu, Atchi, Alai, Parasax.	Vellore ganja, Thattai.	Salami batthiripal, Milk, Vitthuvakai, Ganja.	Kothuripai flour, Ganja powder, Ghee, Salt.

N. B.—I give these lists with the admission that they are far from complete. The ingredients are probably correct, but are only some out of many.

58. I saw no signs of ganja being sold in the open market anywhere, nor in any except licensed bazaars. At one place where the licensed seller was away for some time, the smokers complained much that they could not get supplies, which seemed to indicate that there was no illicit sale there.

I was told that majium could be bought at a certain bazaar not licensed, and from my enquiries I conclude this was the case; but when I sent to purchase some, I found the seller had gone to the neighbouring town, to the market probably, to replenish his stock of majium amongst other things.

60. No control at all as regards cultivation or preparation, only as regards sale.

64. No regulations, as far as I can learn.

68. No.

69. I believe not. We need local option for all such things.

Oral evidence.

1. I belong to the London Missionary Society. I have been in India for nine years. I have been all my time in Coimbatore, and have itinerated through the whole district with the exception of two talukas; latterly I have worked in the south half of the district. I mix freely with the people. Before the special inquiry made for the Commission, which I carried on for six weeks (October 19th to end of November), this matter had not come before me at all, except as I had read about it. I had no experience of the drugs or their effects. I had come on no cases of ill effects from the use of the drugs. I mix freely with the people, but not with those who are usually excessive smokers. I have stated in my paper that these are chiefly fakirs and sanyasis or wandering Hindu ascetics. I have not sufficient experience to say that there is a class of moderate smokers: all the cases I came across were excessive smokers. I cannot say, on the other hand, that there is no class of moderate smokers.

All that I have said in the paper has been gathered from and regarding the score of smokers mentioned in answer 1 and the Mudeliar mentioned in answer 31 and the vendors in the bazaar and here and there a cultivator of the drug.

7. Pollachi is 25 miles south of Coimbatore town in that district. I have not seen the cultivation. The information I got was from a bazaar seller and an Abkari Inspector. I understood it to be regular field cultivation.

31. The sentence "the practice of smoking invariably leads to excess" is the view I formed from conversation with the excessive smokers. I have

mentioned, especially the Mudeliar, whom I regarded as a specially useful witness, as he had once practised and had given up the use of the drug. If I were satisfied that there were moderate smokers, my opinion would alter. But I have not met them. I think that the habit is here regarded with contempt, and that therefore moderate use is not admitted readily. This may explain my not coming on these smokers. This man certainly spoke of smoking only for intoxication; and the words he used and the whole tenor of his remarks showed that he meant more than mere exhilaration.

33. I have myself the opinion that alcohol is decidedly less injurious than ganja smoking. I think the effects of ganja are more rapid. In some respects alcohol is more injurious, as making men pugnacious and so on. But from the fact that these smokers whom I met were young men, and from the general drift of their statements, I judged that the excessive use of ganja killed people off more quickly than that of alcohol. At the same time the excessive use of alcohol has come to my notice, though not to a great extent, in my experience, while that of ganja has not. I think this is due to my presiding over Native churches. Christians sometimes fall into the use of alcohol, and not, so far as I know, into the use of ganja. I am also Secretary of a Temperance Association which takes note of intoxicating drugs as well as of liquor, but these drugs have not forced themselves on my notice. I have little time for work outside of my own duty. Because I think the hemp drug more dangerous, the physical effects so injurious, and the habit so difficult to leave off, I

also think that ganja calls for more restriction than alcohol at the hands of the Government. But what I say is founded on a brief and very limited inquiry. It is only as judging from this very limited experience that I make the above statement as to the comparative effects of alcohol and ganja. I may say that I have never seen a member of the Native church drunk, but I know some take liquor and we disapprove of this, whether in moderation or excess. Coimbatore is not a drunken place. I have seen little of drunkenness among the people generally; only a few cases of really drunk people. I have never seen or had pointed out to me a social wreck from ganja or a man intoxicated from the use of the drug.

35. I found that most of these smokers used opium and took spirits as well. As mentioned in answer 29, one man mentioned dhatura; but as I have said I could ascertain nothing definite about that. I know nothing of it. The use of dhatura was generally denied indignantly. I believe the consumers would, if ganja were restricted, go to opium or alcohol; and as my limited inquiry seems to me to show that ganja is worse than alcohol, I think that (as far as alcohol is concerned) this would be a chance for the better. I do not know whether opium or hemp drugs are worse.

39. My statements regarding the aphrodisiac effects of the drugs are based only on the remarks of the smokers referred to in answer 1 and on the books referred to in answer 40. The statements regarding the non-aggressive character of ganja smokers are however based on my experience of the appearance and behaviour of the smokers I met and talked to.

150. Evidence of the REV. W. V. HIGGINS,* *Missionary, Parlakimedi, Ganjam District.*

7. (a) to (c) Yes.
(d) No.

In nearly every village where there is a population of 1,000 or more.

8. The cultivation is constantly increasing on account of the increasing demand of the article. Now cultivators are constantly taking up the business.

9. The plant grows for four or five years and then dies. After five or six months the leaves will be used, that is, five or six months after sowing the seed. The plant requires little or no care in cultivation.

10. There is no special class. But any farmer is likely to cultivate the plant. Besides this, many who are not farmers will have small garden plots of this plant for their own use.

11. We do not know.

13. It can be cultivated anywhere, and is cultivated everywhere in these parts.

14. It is cultivated for all three of these products.

15. (A) Ganja is smoked. The dried leaves are mixed with tobacco (frequently), and the two are rubbed on the palm of the hand. Then water is poured on, and the stuff is put in a pipe for smoking. (B) Charas is eaten, never smoked or drunk. The flowering tops are rubbed upon a stone and then are mixed with spices, sugar, etc., and are made into cakes for eating. (C) Bhang is the form used for drinking. After rolling the flowering tops, the stuff is mixed with milk and sugar and is drunk.

16. Yes, anybody can prepare the bhang in his house. We do not know anything of the wild plant, or very little.

17. By all classes.

18. Yes, it deteriorates by keeping. If carefully kept, it will hold its power for one year. After the leaves are dried, they will wrap straw or palm leaves about the plants, and keep from the air as far as possible so that it may not deteriorate.

19. The ganja is used only for smoking, but the charas is used both for smoking and for making cakes to eat.

20. All classes use both the ganja and charas. But bhang is expensive, and the former classes do not use it so much.

21. The broken (chur) is the form most used for smoking in these parts.

22. Native charas.

23. Never.

24. The rich or well-to-do use the bhang for drinking purposes. The Uriya people, especially Brahmins, use the bhang.

25. On the increase. It is due to the increase of the habit.

26. About two-thirds of those who use the drug are habitual excessive consumers.

27. Those engaged in study of religious books and mendicants.

28. (a) Ganja, $\frac{1}{2}$ anna. (a) Charas, $\frac{1}{4}$ anna. (a) Bhang, 1 anna.
(b) " $\frac{1}{4}$ " (b) Ditto. (b) " 2 annas.

* Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

29. Generally tobacco is mixed with the ganja, and spices, sugar, and milk are mixed with the charas and bhang. These are mixed with the drug either to make it cool or palatable. Bhang massala is a mixture of many kinds of spices and is sold to be mixed with bhang.

30. Most of the smoking and drinking seems to be done in solitude, but there are public places of resort where the drugs are consumed in company. The drugs are used here only by men of middle age. But the habit is frequently begun early in life. The lungs must be strong to stand the drug.

31. It is easily formed and given up with difficulty, and the tendency is to increase the habit. Consumers often say they can easily give it up, but I think they are too sanguine.

32. It is a religious habit, and is formed for the purpose of steadying the mind for religious meditation.

33. Respectable people among the Hindus say that the habit is a bad one and dangerous. Consumers generally will not at first admit that they use the drug.

34. To moderate consumers there may not be much privation, but to excessive users much privation will be experienced. I am told that when a man stops using the drug, he becomes intensely anxious for it, and after obtaining it devours it ravenously.

35. The consumers would be troubled, but probably no riot would occur. They would probably use other drugs too if available.

40. They often advise the smoking of ganja for medicinal purposes "as a cure of various troubles.

42. The use of all these drugs as a habit is certainly harmful. We have known of cases in which men have lost their reason entirely by using the drug.

44. It intoxicates. It does not refresh or allay

hunger, but it makes one insensible to hunger. Sometimes persons will go without food for several days when taking the drug. Smokers generally use the drug twice a day. The especial effect lasts for about half a day. After the immediate effect is over, the consumer is weak and often has to lie down. Yes; after using the drug there is longing for it again.

45. Yes; little harm physically, mentally, and morally is apparent. We know of two cases in one street (one a Government peon and the other a constable). They have both become insane from the use of ganja. They are mere skeletons and imbeciles. Their insanity is permanent. They used it moderately at first, but now use it very excessively. It produces bronchial trouble in some cases.

49. We hear that it is so used.

51. The users of ganja are not really considered as respectable people by the best members of Hindu society.

53. We know of a Brahmin who, while intoxicated with bhang, beat his child terribly. When he became sober, he cried bitterly with his wife because of what he had done, and he confessed that he did it while intoxicated.

60. We think that the hemp plant should not be allowed to be cultivated, except by those licensed by Government to grow it for medicinal purposes, if it be so required.

68. We know that there are places here where the drug is consumed by those who attend the place, and yet we do not know whether they are licensed to keep such an establishment or not. One man of whom we know is allowed to sell the drug. He is licensed to do so. Certainly the houses or shops where the drugs are consumed should be closed up, and licenses granted only to those who are proper authorities for selling medicinal poisons.

69. The wishes of the people are not consulted at all, as far as we know.

151. *Evidence of the REV. A. MARGÖSCHIS, Medical Missionary, S. P. G., Nazareth, Tinnevely District.*

1. I have lived alone amongst the natives for 18 years, and have been in medical charge of a hospital and dispensary all the time.

2. The dry flowering tips and twigs can be obtained.

6. Not dense in Tinnevely, but it grows sparsely.

7. Yes. Native vydians grow it for use in their treatment of patients.

8. Not that I am aware of. There is not much demand for it.

10. No special caste, but native doctors chiefly grow the plant.

12. Yes. To a very slight extent, a few plants are sometimes cultivated in a garden amongst other plants.

14. Yes. Your definitions under Chapters I and 2 are mixed and confusing. The wild and cultivated plant can be obtained as (a) resin, (b) dry leaves and twigs, (c) a confection.

15. See above, 14.

17. By native doctors.

18. Yes. It quite loses its effects in time.

If carefully preserved from damp and exposed to the air it will keep for months.

19. There is very little, if any, smoking in this district.

23. See 19.

25. There are no signs of its being on the increase.

26. See 27.

27. Nearly all native doctors are moderate habitual consumers, and they prescribe it to their patients, who are therefore occasional moderate consumers.

40. Yes.

41. (b) Yes.

(d) It is good in nervous and spasmodic diseases, chronic rheumatism, neuralgia, asthma, diarrhoea, and dysentery. The poor labouring classes use the drug as moderate occasional consumers.

42. As used in this district by the majority of consumers, it is harmless and often beneficial in sickness.

43. Yes.

44. (b) Yes.
 (c) Not in small quantities.
 (d) Yes.
 (e) Very considerably.
 (f) According to the quantity taken it varies.
 (g) No.
 (h) Only in habitual consumers.
45. (a) No.
 (b) No.
 (c) No. It increases the appetite.
 (d) No. It relieves all these diseases.
 (e) Not in moderate doses.
 (g) I have met only one insane who became so, it was alleged, from the excessive use of the drug.

He took it in order to put himself in a position to study magic and witchcraft. He was suffering from all the symptoms of acute mania.

47 No.

53. See 45.

55. Yes.

58. It is working well and requires no alteration.

60. Cultivation of the hemp plant for the production of bhang should not be controlled more than at present.

63. The vend of these preparations is extremely limited in this district. No special legislation different to that now in force is at all necessary.

68. No.

152. Evidence of the REV. JOHN S. CHANDLER, *Missionary, Madura.*

1. Conversations with natives and other missionaries.

2. The distinctions between bhang, charas, and ganja are not common here. Not known, so far as I have inquired. Bhang and ganja are used interchangeably. Four kinds of ganja are mentioned—odoriferous ganja, resinous ganja, cultivated ganja, and wild ganja. The odoriferous ganja is said to be a large shrub; but as both this and the resinous ganja do not grow here, the distinction may not be accurate. Two preparations are made, either from the leaves, or from leaves, flowers, and stem all together, and the form is the flat ganja.

3. The Pulney mountains.

4. Ganja and bhang.

6. Scattered.

7. There is some cultivation of the plant, especially where Muhammadans live; but not to a great extent, because the abkari peons threaten those who raise it.

8. Decrease seems to have resulted from the action of abkari peons.

9. Usually it is raised from seed in private gardens.

10. Same as other cultivators, but especially Muhammadans near their mosques.

11. Not to a great extent on the plains; perhaps not at all.

13. I presume it can be raised anywhere.

14. See answer to No. 2.

16. Where raised it is prepared privately; but the chief use is of the odoriferous ganja, which comes as flat ganja, prepared in the north.

17. The Muhammadans, ascetics, and some of the lower classes of the people prepare it.

18. Ganja deteriorates and the electuary formed of it moulds by keeping. It is said to lose its effect entirely after a few months. It keeps from two to six months. It must be kept under cover.

19. Ganja is used chiefly for smoking with tobacco, but is also eaten as an electuary or mixed with food, and sometimes drunk with water or milk.

20. Muhammadans and ascetics and the low castes use it, chiefly by smoking.

21. Odoriferous ganja from the north.

26. Ganja—

(a) One-eighth.

(b) One-half.

(c) One-eighth.

(d) One-quarter.

27. The ascetics take it to sustain them in long journeys without food. The Muhammadans take it for the intoxication. Others take it because of their poverty and exposure. But all take it more or less for intoxication.

28. Ganja—

(a) Half anna.

(b) One anna.

29. Tobacco and spices for smoking, sugar and meat for eating, and milk and water for drinking. Dhatura is mixed with tobacco for asthma, but not with ganja. A "massali" is used for horses and people that has ganja or bhang in it. Its ingredients are garlic, pepper, assafoetida, onion, dried ginger, galanga, piper dichotomum, piper longum, allspice, nutmeg, arrack, and bhang.

30. Both in solitude and in company, ganja electuary is given to children. Boys also take it in sport for the intoxication.

31. Easily formed; broken off with great difficulty. The tendency to develop into excessive use seems strong.

32. (a) In the Kama festival this is especially used, and by some is connected with the idea of Siva's passion under intoxication.

(c) Excessively and in manner likely to lead to the habit. The Sittar are all said to have written their famous poems under the influence of ganja.

33. All who use it are despised. "A bhang eater," "a ganja smoker," are terms of opprobrium. When they take it, as Siva is said to have used it, they worship him as they take it.

34. They are so dependent on it that very likely it would cause them suffering to drop it at once.

35. (a) Yes; to a considerable extent in this district.

(b) Some would probably bring it in from the north; but residents generally would not do it illicitly.

(d) Only at first.

(e) No.

(f) Very probably.

36. Yes; there is some reason, but not very much. The fact that the drinkers of alcohol are increasing, whereas those that use ganja do not seem to increase, but rather to decrease.

39. Smoking is said to be less injurious, because those who smoke do not commit such excesses as those that drink.

40. (a) Yes.

(b) Yes.

41. (a) No.

(b) Yes.

(c) No.

(d) No.

Nearly all use it more or less for staying power.

42. I consider it harmful, because of the effect on those who use it, taking away their appetite,

causing redness of eyes, general debility, and such difficulties as asthma.

43. They are not offensive.

44. (a) It produces intoxication.

(e) It prevents hunger.

(f) Three or four hours.

(h) Weakness follows and a longing for it.

45. (a) It exaggerates effects referred to under 44.

(d) Yes.

(e) It does

(f) It does.

49. (a) It is used.

(b) Prostitutes do use it.

(d) It is supposed to.

51. I suppose that it is used with alcohol for crime, but have no specific information.

153. *Evidence of the REV. H. F. LAFLAMME, Canadian Baptist Mission, Yellamanchili, Vizagapatam.*

1. The evidence given below represents information gathered from the following:—

Rev. J. Craig, B.A., Akidu, Godavari, a missionary of the Canadian Baptist Mission of fifteen years and over of Indian experience.

Rev. G. Churchill, Bobbili, Vizagapatam, of the Canadian Baptist Mission, with an experience of almost twenty years in India, a man of quick perception and of an intelligent interest in all Indian affairs.

Rev. J. R. Stillwell, B.A., Samalkota, Godavari, the President of the Literary and Theological Seminary for the Canadian Baptist Mission, with an annual attendance of some 80 or 100 young men coming from different parts of the Kistna, Godavari, Vizagapatam, and Ganjam districts. His Indian experience extends over eight years.

Rev. J. E. Davis, B.A., of Cocanada, of the same mission, with an Indian experience of over six years and a very intimate knowledge of all the large and densely populated country within a radius of 40 miles about Cocanada.

Rev. R. Garside, B.A., of Tuni, Godavari, of the same mission, with an Indian experience of six years.

Rev. J. G. Brown, B.A., of Vuyyuru, Kistna, with an Indian experience of some four years and a knowledge of the taluks on the north banks of the Kistna next the sea.

The writer's experience in India extends over six years.

All of the above have a thorough knowledge of the vernacular, and through constant touring in the villages are intimately acquainted with the general condition of the people of all castes. Their evidence, as given below, represents not only knowledge acquired from personal observation, but that acquired by conversation with all classes of the people, from the college-graduated Government servant to the village sweeper.

This information represents the sea-board districts from the Kistna to Ganjam, including only the Telugu portion, or as far as Berhampur of that district, as well as some few facts regarding Burma in the vicinity of Rangoon.

2. Charas is used in North India, but is not known extensively so far south as this.

Bhang and ganja are both known here; the former as bangi or bangu and the latter as ganjai.

As the cultivation is illicit, information under this head is difficult to secure, and such fine distinctions do not seem to hold as broken, flat, and round ganja. From samples seen, the round seems to be the only kind used.

3. I have not authentic information, but several informants have stated that in the Agency tracts and the jungle parts of these districts, excepting the Kistna, of which I have no information, the hemp plant grows spontaneously.

7. Yes.

(a) Yes.

(b) Not as known.

(c) Yes.

(d) Not as known.

In the Godavari delta in the taluk of Yenaqudam, in Cocanada, Samalkota, Narsapatnam, Yellamanchili, Vizagapatam, Vizianagram, Chicacole, Bobbili, and some surrounding villages, Berhampur, and Cuttack, in all of which places the plant has been seen by informants.

The cultivation is not extensive, and no land is set apart for that special purpose. But a few plants grow in the backyards and garden plots of those addicted to its use for personal consumption and by a few daring men who eke out a profit by selling it. The *mats*, or peculiar home of the religious mendicants, sanyasis, or, as they are termed in these parts, bairagalu, have usually quite a garden plot attached in which the hemp plant is cultivated, but only to supply the need of the monks and their disciples. Such monasteries exist, I am informed, at large places like Samalkota, Chicacole, Berhampur, etc.

8. The answer seems to be that the cultivation of the plant is gradually extending in Ganjam, Vizagapatam, and is being introduced into Cocanada and such places.

As for Yellamanchili, some four years ago, when the writer first came to the place, very little was grown owing to a recent proclamation

against it. But since then it has been resumed, and one may see some plants even in the police lines. If this is the case here, the increase is due to lax police supervision.

From Cocanada the informant says that the people formerly purchased it at the shops; but finding the seeds of the flower grow when dropped, they now grow all they need in the backyards.

9. One of my preachers, who lived many years in Samalkota, tells me that an old man there cultivated the plant for sale. He cut out all the males, allowed the females to ripen in flower, cut them, and stacked them under a weight much as tobacco is pressed. When sufficiently cured, did them up in bundles and sold or used them. The leaves, it seems, were shaken off, and only the flower adhered to the stalk.

10. About Bobbili the gardener caste grow it. In every monastery belonging to the religious mendicants it is grown, but, being illicit, there is no class who cultivate it specially.

14. (a) Ganja is prepared privately, and in a few cases for illicit traffic, but only by drying. When the devotees or mendicants meet their disciples at little village temples, they extract a pipe full of the flowers from their pouch, wet and squeeze them, repeating the operation some four times, and finally pressing it in a cloth till the juice seems pretty thoroughly pressed out and the leaves well macerated; then adding from one-third to half its bulk of tobacco they fill the pipe and light it.

(c) Bhang is simply the dried leaf mixed with several ingredients, such as milk and spices. These preparations extend to a limited degree throughout the whole area mentioned, but confined to the larger towns, say above 5,000. They are for the most part private.

15. Ganjai for smoking as above.

A preparation is made by baking the leaves, boiling them in ghee, and adding sugar in sufficient quantities to make a solid compound much like a sweetmeat. This is eaten. The name given it is *mayu*.

16. Bhang is not used generally in the houses. Only one place is known in which it is so prepared, and that is Vizianagram, and there by a limited number only.

18. The ganja does not keep well for more than a year and a half. However the keeping quality possibly depends on the preparation, and my information is not sufficient to state more.

19. Ganja is used generally only for smoking. The seeds are sometimes chewed.

Charas is used for smoking, if used at all. When the consumer lacks a pipe, he makes the tobacco and ganja into a cigar with a green leaf and smokes it; or if he lacks time or inclination to do this, he will sometimes mix the ganja with a paste and chew it as they chew tobacco.

20. (1) *The classes who smoke ganja.*—Religious mendicants, Muhammadans, Brahmins, goldsmiths and carpenters, weavers, and men of the Vedantist sect, and soldiers and policemen who do service in feverish districts.

(2) *The proportion.*—A very intelligent native gentleman, a graduate of the Madras College and a District Munsif, tells me that in his native district the following are about the number addicted to ganja in the large towns mentioned: Berhampore, 1,000 out of perhaps 25,000; Puri, 800 out of 20,000; Cuttack, 1,000 out of 30,000; and Chacole, 700 out of 15,000.

Mr. Stillwell furnishes information gleaned from his 100 and more students to the effect that for ganjai of male population (adult) one in ten, and for charas one in five. This latter estimate is certainly excessive. Mr. Garside says that in Tuni and Paikaraopetta, the adjacent town, with a combined population of 10,000, about 150 use ganjai. The Mirasidar of Yellamanchili and a leading Vakil state that in the population of 6,000 some 300 use ganja. The use of ganja is more excessive near the jungle districts and in the foot hills of the Eastern Ghâts. As far as I can gather, my opinion is that as for ganja, (1) the religious mendicants, commonly called bairagis or sanyasis, all use it. (2) The people attached to the monasteries (*matamalu*), where these men congregate in large numbers, and which is the only home they have, also use it. Amongst these are women and children. (3) The disciples of these men in the villages which they habitually frequent use it, and their numbers differ in different places. They usually visit only larger villages of 1,000 inhabitants and more, and in such places there may be 30 or more men who smoke ganja with them. (4) Many Muhammadans are reported as using it, so that it has passed into a proverb. When a man desires something another does not wish to give, he is reproved by the proverb, "Why, you are like a Muhammadan after ganja." (5) Of the remainder of the people, perhaps the general division may be between the well-to-do and the poorer classes. The latter use ganja, the former, bhang. Of the poorer classes, the goldsmiths, carpenters, vendors of sweetmeats, and such people as are of a rather unsettled habit of life, constantly moving from place to place, *e.g.*, soldiers, police, salt and other peons, etc., use it; although, from any information gleaned about these, I am not convinced that the habit is at all general or even noticeably prominent as are the habits of liquor-drinking and opium-using.

(3) *The localities.*—Those mentioned in Chapter I, Question 1.

21. The round ganjai and the flat seem to be generally used. The broken ganjai is not used as an article of exchange, though by the time it is ready for use, it is, as paragraph 14 indicates, very much broken.

23. Mr. Garside is the only one who volunteers information under this paragraph. He says bhang is used for smoking by the weaver caste.

24. Mr. Stillwell, who speaks with the voice of 80 men, is the only one who volunteers very much information under this head. He says it is used by about one in ten (I presume of the adult male population), and in both ways, but as a drink especially in the hot season.

Two very scholarly Brahmin gentlemen, one a teacher and the other in the Judicial Department, tell me that Vizianagram is a notorious place for bhang-drinking, and they know whereof they affirm. It seems the habit has been introduced from Benares by the pundits attached to the train of the Maharaja as well as by the Muhammadan quota, and has been gradually extending amongst their intimate friends and acquaintances until the custom has become quite prevalent. One of them was of opinion that it was generally used in the form of a drink mixed with milk, spices, aniseed, pepper-water, dried ginger, etc. The other declared that a great many used it in the form of a sweetmeat. As their testimony, which is very emphatic, is corroborated by general rumour, I am disposed to conclude that in Vizianagram more

of bhang is used than ganja. One of them affirms that even coolies earning only two annas a day take it.

Information about bhang seems difficult to secure, even though the habit may be widespread. It may be owing to the fact that it is usually taken privately and as a rule by office men and Government clerks and employes, whereas ganja is smoked openly in the village temple and by poorer men whose lives are more open to observation. However, from my general information, I should suppose that where one uses bhang two use ganja.

25. Very little of the ganja used seems to be purchased through the stores licensed by Government to sell. It is generally grown by the consumers themselves, and the general conviction seems to be that the consumption of bhang and ganja is on the increase.

One very intelligent native gentleman gave it out as his opinion that where two used them previously three do at present.

To trace the cause of this increase is rather difficult; but I venture the following explanations: (1) The religious medicants carry it with them wherever they go, and invite all to smoke ganja from their pipe. Many do and form the habit. (2) A shameful habit, once formed, demands some excuse, and the habitual consumers give it out that the drug is good for coughs, asthma, consumption, etc., and recommend it to others. (3) In the earlier stages a little satisfies, but later more is required to produce the desired effect, and so the consumption extends. (4) It produces an intoxication which drowns care and tends to long periods of self-forgetfulness. Some, therefore, are induced to use it at times of great mental distress. (5) There is a popular superstition that the use of ganja counteracts the bad effect supposed to be produced by the water of a strange well; and as the introduction of new means of communication, an extended Government service, etc., conduce to much more travel and change of water amongst certain classes of the people, the habit is extending. (6) Pensioned sepoys are said to be addicted to ganja to a noticeable extent. If so, the growing number of such veterans, who are usually men of some little influence in the small villages to which they return because of their distant travels and extended knowledge, may account for somewhat of the increase. (7) These bad habits have a peculiar fructifying power in the hearts of men, and will flourish when good habits would die out but for careful cultivation.

26. As the hemp drugs habit is considered more or less disgraceful, none but actual consumers, or men who daily associate with them, could answer this rather large question; and while one might be able and willing to answer it truthfully for his street or village, no one could give information sufficiently general in its scope to be of much service in making such a discrimination as is required by the question.

Speaking very generally, I should conclude that the majority are habitual moderate consumers. Very few who contract the habit ever seem to abandon it, and yet just as few seem to indulge in an excessive habitual use of the drug.

On the occasion of the visit of a celebrated sauyasi to a village, his presence in the temple, smoking every night occasions an excessive indulgence in those who associate with him, but they seem to relapse into their ordinary habit after his stay of a few weeks or a month is over.

The tendency is to an excessive use, and one

man of wide experience and close and careful observation states that very few who commence with moderate quantities are satisfied, but gradually increase the daily amount. However, the distinction between the four classes mentioned in the question when defined by the natives whom I have asked does not appear to be very perspicuous.

27. (1) The religious ascetics use it (ganja), because they are enabled by it to overcome desire and thus attain that holy state in which the soul is filled with all reverence to the Deity. Shrewd observers say that they certainly lose all desire, for many of them smoke to the sacrifice of food, sense, reverence, health, strength, and everything that goes to make up manhood. (2) The disciples of these men smoke because their masters smoke, drawn to it by the seductiveness of the drug, in some cases to drown care. (3) The Muhammadans I surmise to be more familiar with it than other classes of the people, because the drug as used seems to have been introduced from north India, possibly being carried down in the Muhammadan invasion. There is historical evidence that the drug was used commonly in the Muhammadan armies. (4) That the water of strange wells conduces to fever and sickness in the user is a widespread belief amongst the people. To counteract the supposed ill effects of this water, travellers or newly arrived residents in a place who may suffer from ill health resort to all sorts of reputed cures. Amongst these stands ganja. Soldiers, police, and men whose habits are more or less nomadic use ganja to a more marked extent than other classes of the people, and for the reason stated above. (5) Then ganja has a reputation amongst its devotees of curing coughs, asthma, etc. A few are induced to adopt the habit by this consideration. (6) Card-playing parties and gambling dens are places at which the habit is practised and fostered.

As for bhang: (1) amongst those whose habit of life is sedentary, and whose work requires long continued mental application, some are said to be addicted to the habit. (2) The pundits, who ape the fashions of Benares, the great religious centre of all India, are said to use it to a limited extent.

28. As very little of the drug ganja which is used is purchased, the great bulk of that used being grown by the consumers themselves, this question does not meet with many replies.

What to one man is moderation is excess to another. Habitual moderate consumers who purchase the drug may spend from half to 2 annas a day. Excessive consumers, 2 to 6 annas; but I have no means to indicate by actual weight how much that signifies.

There is a popular comedy acted by companies of strolling players in which a king is represented as sitting upon his throne, and, being harassed by the affairs of state, summons a chief peon, whom he orders to at once secure, regardless of cost, a drug which will produce immediate intoxication. The peon returns shortly with a lighted pipe, which he hands to the king. After smoking it, with very evident satisfaction, for a short time, the king, losing all consciousness, subsides into a deep sleep. During this interval the peon, who seems to be the clown of the comedy, amuses the audience with some very entertaining antics about the august presence of the monarch, and finishes by imitating His Excellency's imperious summons,

call for the intoxicant, his satisfaction in securing it, and finally the smoking. In a few minutes he subsides into a deep sleep. After some time the king is represented as resuming consciousness and becoming very angry at the position and condition of the peon, whom he at once attempts to rouse. He is not successful. When the peon finally comes to the king, who is immensely pleased with the drug, asks the peon how much the potent medicine cost. The peon answers, mentioning the smallest current copper coin. The king, who had expected to hear some large sum named, is quite annoyed to think that so cheap a weed should so easily intoxicate him, and with the customary exclamation of disgust "Chi, chi, po, po," summarily dismisses the peon amidst roars of laughter from the audience.

Ganja has the reputation amongst the people of being one of the most powerful intoxicants known, so that much of it is not required to produce excess.

29. With ganja, tobacco; with bhang, cow's or cocoanut milk, pepper, ginger, aniseed, sugar, cloves, cinnamon, nutmegs. Only one case is reported where the bhang was mixed with dhatura to intensify its intoxicating effects. But of that case more later. One man reported cases in Rangoon and these districts where the consumers mix poppy seeds with a paste made from the leaves of the hemp plant and chew the compound much as they do tobacco. These were exceptional cases.

30. (a) Ganja is smoked in company as a rule, the pipe passing from mouth to mouth like the pipe of peace amongst North American Indians. Excessive consumers smoke at all times and use the drug mixed with tobacco, the same as others use tobacco. Bhang is generally taken in solitude.

(b) Ganja mostly confined to males from 15 years up. A class of women called matagulu, who correspond to the bairagulu, are said to use it. They live a homeless, wandering life.

(c) Ganja.—Boys attached to the *mats* or monasteries of the religious mendicants or friars will use it from eight or ten years of age onward, but I hear of no others.

I cannot speak of bhang.

31. (a) The ganja habit is easily formed, not being attended with such disagreeable primary effects as tobacco, and being much more seductive in the rapidity with which a taste for it is acquired.

(b) and (c) It is very seldom, if ever, given up when once formed, and the tendency is strongly toward excess. One informant states that he knew of two old men over 85 who were compelled to give the habit up, as they could not endure the stimulating effect.

32. (1) (a) The ganjai habit is called "the leaf of wisdom" amongst the sanyasis or religious ascetics, because the use of it produces a mental state conducive to a knowledge of the Deity.

(b) The use of it by them, though all but universal, is not considered essential.

(c) It is generally excessive.

(d) And injurious.

(2) (a) The use of ganja is universal in a religious society called "Universal Wisdom."

(b) It is essential in that society's meetings, which, however, do not seem to be frequent.

(c) It is then excessive.

(d) And injurious.

(3) (a) In Vedantic religion.

(b) Not essential.

(c) Excessive

(4) (a) In Puri there are three idols, one of whom, Balabhadra, is said to be very fond of ganja. All the officials in that temple use ganja, and each night a large quantity is prepared and placed before the image, and is afterwards consumed by the attendants.

(b) Essential.

(c) Excessive.

33 (a) The ganja habit is regarded as bad by the educated, because intoxicants are forbidden in the Shastras; by the uneducated, because of the injurious effect produced by the use of the drug. A man who habitually indulges to excess is regarded as lacking in sanity. They do not believe his statements or respect his opinion. In fact, there is a common saying applied to a man who talks wildly or foolishly to the effect that "he talks as a man who smokes ganja." If a stranger comes to a town and is known to be following the advice of a man addicted to ganja, the neighbours say, "Will you listen to that lunatic? Why, he uses ganja." And the poor fellow's influence is at once destroyed.

(b) There is a very strong public opinion against the practice, which is regarded by the people as bad and injurious. It produces intoxication, which in their eyes is shameful and disgraceful. It produces in the course of time weakness and dependence on others for help, which is resented. The consumers are themselves ashamed.

Many are surprised to hear that the Government is concerned about a practice which is confined to so small a portion of the people as use ganja and bhang, and are not seemingly concerned about the widespread, rapidly-increasing, and much more injurious habit of alcoholic drink, from which much greater harm results.

34. The information under this head is conflicting. Some say "yes," because a strong unnatural appetite has been formed, which will cry out for the drug. Whereas the majority say "no;" That while the habit, when once formed, is seldom, if ever, discontinued, yet the deprivation of it does not seem to be attended by the racking pains and suffering caused by abstention from opium and alcoholic drinks. A ganja smoker comes into the village. He finds there is no shop here. The last shop was 15 miles back; the next is 26 miles on. He goes on seemingly not inconvenienced by the temporary deprivation. But when an opium user comes, if he cannot get the drug, he falls down exhausted and declares he will die.

The numbers are most difficult to ascertain.

35. (a) Owing to the paucity of shops in these parts, practical prohibition exists. Much that is consumed is consumed illicitly. The introduction of the license system seems to have had no appreciable effect on the use of the drugs. The ganja is nearly all grown by the consumers in their own yards.

If one illicit grower were arrested in each village, the plants would all be rooted out. But, as it is, the police themselves are in collusion.

(d) No serious discontent would result in this province.

(f) As the appetite created by the drug differs from that created by either alcoholic drinks or

opium, there would be no recourse to them for that reason; and as no other drugs are so used, it is quite probable the practice would die out.

38. The uniform conviction is that the use of alcohol is growing to an alarming extent, and though not taking the place of hemp drugs, it is doing incalculably more mischief in these districts. The informants all agree that the use of any of these drugs in any quantity is dangerous and bad. They are not concerned with differences in degree of injuriousness.

39. However, ganja-smoking is regarded as more injurious than bhang-drinking, as the admixture of milk with the latter is said to counteract its ill effects. Whereas some say that the drinking of the preparation of any one of the different parts of the drug is more injurious than the smoking.

40. Most native doctors are familiar with its use medicinally, and prescribe it in a mixture called *madanakaveshnamu* to convalescent patients as a tonic. What the compound is I have been unable to discover, but am told that it is very expensive, very seldom used, but seems to be effective.

41. All regard ganja as useless in any of the ways mentioned in this paragraph, and regard the statements of the consumers as mere excuses to continue the use of a habit generally regarded as degrading. A few seem to be under the impression that bhang taken after a meal will enable a student to continue mental exertion hours together—three or four—without fatigue. In one village some students do this, but the practice is not general. Bhang has the reputation of being a good appetiser; but a very well educated Brahmin of high position declares that the men who use it do get slightly intoxicated and eat regardless of consequences. Even those who use ganja to prevent effects of bad water do not seem to be benefited by it. And the digestion is said to be injured.

42. The answer is "no." It is bad. Tends to excess. Being a poison, it must and does injure, so that even consumers of the moderate class are recognisable by their appearance. The strong become weak and the healthy sick.

43. The neighbours do not love them, care for their company, or regard their word. They are thus mildly inoffensive.

44. (a) to (f) Ganja smokers see double, are slightly and pleasantly stimulated, but do not stagger. The effect lasts a few hours, I suppose according to the amount taken. They seem like men who have fasted half a day after recovering. They may or may not be hungry, but are always weak. They are unsteady. Bhang intoxication lasts a few hours. Those not accustomed to its use will become intoxicated in half an hour. But the effect is said to be counteracted by butter-milk or lime juice.

(g) Habitual users are dull.

(h) If deprived of either, the longing does not seem to be great.

45. (a) Yes.

(b) Ganja is said to produce a cough, the disagreeableness of which is prevented by the smoker using an excess of ghee. If well-to-do, he takes a good deal of rich sweetmeats in which ghee is freely used.

(c) It is said to injure the digestion.

(d) It is said by consumers to be good for asthma; but this is not generally believed.

(e) It induces laziness, and to such an extent that "a lazy man" and "a ganja smoker" are synonymous terms, though the lazy man may not use the drug at all.

(f) It deadens the intellect, and makes users dull and stupid, even though they have been bright and healthy before.

(g) I know personally one case in which a man under the influence of insanity produced by ganja attempted murder. He was a Telugu, who professed conversion to Christianity—a man who had borne a good character, quiet and inoffensive, was baptized by me, and returned to his village. He was driven out, his wife locked away from him, and his child torn from his arms. In an attempt to secure a standing crop some days after, he was violently beaten, being stunned by a blow on the head. A few weeks subsequently he became violently insane, and finally attacked a gang of coolies with an American shovel and a lime-pounder, struck some, and so seriously injured one man that we took his dying deposition. He was confined in jail and became daily more violent, then was sent off in three or four days to the district jail at Vizagapatam, and finally was admitted by Lieutenant-Colonel-Surgeon Leapingwell into the asylum. Being determined on prosecuting the man who had struck him if the blow had caused the resulting insanity, I visited the District Surgeon and learned from him that he was of opinion that the insanity had resulted from the use of ganja. As I knew the man had been using it at the time I let the matter drop. He spent from December 1892 to October 1893 in the district jail at Vizagapatam and the asylum at Waltair. He seems to be quite better now. He is not an habitual ganja user. In this case my impression is that the man sought relief in ganja from his excessive mental trouble, and his mind, not ordinarily very strong or courageous, gave way under the added stimulating excitement, and he became crazy.

Colonel Mark Wilks in his history of Mysore relates the following instances:—

Bhang.—Vol 3, pages 118-119. The account of the siege of Bangalore, March 5th, 1891. "During the ineffective cannonade which has been mentioned, and while Lord Cornwallis, accompanied by General Medows and their respective staff, were viewing from a gentle eminence the movements of the Sultan (Tippu Sultan), three horsemen were seen to approach rather closer than usual; but as these troops are remarkable for their skill and boldness of examining an enemy's movements, and are usually scattered over the country in all directions, they excited no attention till they were seen to dash at speed for the person of Lord Cornwallis. Two were killed, and the third also secured and spared. He appeared stupefied, and could give no intelligible account of the enterprise. Conjecture was divided between assigning to them the character of ferocious drunkards or hired assassins. The fact, as related in the Mysorian Army, appears to be that the preceding evening one of them had upbraided the other two with cowardice in the business of the day. After some discussion they retorted that on the next day they would go where he durst not follow. It was agreed

that their valor would be put to this issue. Each prepared himself with an intoxicating dose of bhang, and the quarrel ended in the frantic attempt which has been noticed." The writer adds in a foot-note that bhang is the leaf of the *Cannabis sativa*.

The other instance is by the same writer, Vol. 3, pages 237-238, one of the editions published about 1812 or 1817, to be found in the library of the Bowring Institute in Bangalore. The incident referred to occurred at the siege of Seringapatam, February 10th, 1892. He writes as follows:—"When the allied armies were before Seringapatam, a detachment of cavalry sent by Tippu Sultan to kill Lord Cornwallis mistook the tent of Colonel Duff, commander of the artillery, and charged that, but were repulsed. * * * The use of bhang or opium among the horsemen of India is a familiar preparation for a desperate charge, mischievous at the best even for that single purpose, but utterly ruinous on any service requiring self-possession. I am disposed on inquiry to concur with those who attribute the failure on this occasion to intoxication." In a foot-note, Colonel Wilks defines bhang "as the leaf of the *Cannabis sativa* (hemp plant) used in various forms, green and dried, and sold as an intoxicating substance in every bazaar in India. I certainly would not state the fact if I supposed public brewers to be ignorant of this article of the *Materia venenata*."

There is still another instance related to me by the District Munsiff of this place concerning a relative resident in the same house with himself in Berhampur, who died insane from the result of an excessive use of bhang. He had been a man of superior intelligence, of very entertaining conversation, and pleasant manners. He was a writer in the Madras Bank and contracted the habit. His custom was to macerate the leaves in water to form a paste; then to mix this with milk, sugar, dried ginger and aniseed and spices, pouring the whole from one vessel to another, and skimming off with his hand the foam that resulted. When it had got thoroughly mixed he drank it. He gradually increased the dose, lost his situation, but still persisted in the awful habit. He raved like a maniac when deprived of it, and threatened to kill whoever interfered with the exercise of his indulgence. At last he became violently insane, and had to be tied with ropes to keep him from injuring himself and others. He could not put two intelligible words together. He could not distinguish food from filth. He lost the gift of speech and the power of his limbs, and became like some helpless animal. He would use a ball of the paste the size of a man's fist each day. Latterly he mixed dhatura seeds with the other ingredients. He died from the effects of his debauchery.

There is another case in which a waterman in my own employ, who was addicted to ganja, impoverished his wife and family and left them in order to follow the life of a wandering sanyasi and is now on the road. The immediate cause of his dismissal was violent and threatening behaviour induced by excess in ganja smoking.

Mr. Davis, of Cocanada, reports that one of his preachers, an otherwise kindly, docile, and intelligent fellow, entered his bed-room one night shouting like a mad man. He was under the influence of ganja. He had to be tied up at another time to keep him from killing his wife. He was finally dismissed. He had previously been a sepoy, and contracted the habit in the army. The same authority declares that of other two whom he

knew both died, one a carpenter, the other a house servant; the latter took it for asthma. Another is still living, but is perfectly useless—a moral and a mental wreck. In this last case opium has as much to do with the man's sad condition as ganja.

There is still another case in which I remember a travelling sanyasi or ascetic rushed into the bed-room of the wife of one of our missionaries when I first came to the country. He was evidently under the influence of ganja or bhang, and it took about six of his disciples to hold him, he was so violent.

Beyond these I know of no other cases.

49. There is a belief amongst young men—how extended I cannot tell—that the use of bhang boiled in ghee and mixed with sugar to make a sweetmeat, if eaten regularly, will increase their virile power. This compound is called *Mazu*. What foundation there is for the belief I cannot say; but the practice certainly exists, as I know from very reliable sources.

I am, on the other hand, informed that men who smoke ganja to excess lose all sexual desire; and from the fact that religious ascetics use it for that very purpose, I am inclined to believe the statement. However there may be individual exceptions.

53. See § 45.

55. Most certainly complete stupefaction can be so induced. One young man told me that a drink of bhang administered by a fellow-student put him into a deep sleep in fifteen minutes, from which all possible efforts on the part of his parents could not rouse him for several hours.

56. The case of the District Munsiff's uncle mentioned in 45 was possibly aggravated by admixture of dhatura.

57. Ganja is sometimes mixed with poppy seeds and eaten, but cannot describe its effects.

62. The belief of the people that the Government are opposed to the cultivation of the plant is a strong preventive. If the fear of the people is incited by an occasional arrest for cultivating, the production locally will be fairly well controlled.

63. As a body the missionaries of the two Canadian Baptist Missions, representing fifteen stations, and some forty-five missionaries, and the native communicants, who number over 3,000, are opposed to the license for public sale of any such drugs. If a man is a known consumer, if any of them even moderately, he is not received into church membership, and if he becomes a member without knowing that the habit is contrary to the church discipline, he must give it up or suffer expulsion from the body. In order, however, that the members of the Commission may understand our position, it might be well to add that the use of opium and liquor (*i.e.*, alcoholic drinks) equally debar from such membership. Not that there is any rule to that effect in the church; but the sentiment is very strong that the use of any such drugs or drinks is not consistent with the practice of a Christ-like life. I have been unable to secure a very general expression from the body as to the relative ill effect of hemp drugs, opium, and alcohol; but, in so far as I can gather, all are united in the belief that in these parts any way hemp drugs are thus far the least injurious, and that opium and alcoholic drinks are not only much more extensively used, but much more baneful in their effects.

69. It all depends upon what that local opinion is. Under the present form of government local opinion is not consulted, and even if it were considered and were inimical, it is questionable if there were a prospect of a large revenue but that the shop would be opened. I question whether the Government could devise any means, except by the secret ballot of securing a general untrammelled public expression, and amongst a people so largely illiterate as these are, that method would be impracticable.

70. The large percentage of drugs used are untaxed, and they are used by the classes indicated in previous paragraphs.

Further paper put in by the REV. MR. LAFLAMME.

In looking over a little medical work entitled "Bazaar Medicines and Common Medical Plants of India" (1883), by E. J. Waring, C.I.E., M.D., Surgeon-Major, retired, Editor of the Pharmacopæia of India, etc., I noticed the following on Indian hemp which you may not have seen elsewhere:—

"The treatment of tetanus by smoking ganja (Indian hemp) introduced by Assistant Surgeon A. C. Khastagir (*Indian Medical Gazette*, August 1878) promises to supersede all others in India if it were only from the fact that the remedy is procurable at a trifling cost in every bazaar throughout the country, and that its application is simple in the extreme. A pipe, hookah, or Indian hubble-bubble, charged with about 15 grains of dried ganja leaves, alone or mixed with twice as much tobacco leaves, is to be kept in readiness, and immediately on the indication of a spasm coming on is to be lighted and handed to the patient with directions to smoke. By the time this is finished, or even before the spasm relaxes, the eyes close, and the patient falls into a kind of slumber. The pipe is again charged and kept in readiness for the next spasm, when the process is repeated with similar results. In this way the drug is administered day and night uninterruptedly, during which the irritation of the nervous system slowly but steadily yields to its influence. Mr. K. details five cases treated in this way; no auxiliary medicine beyond an occasional purgative if required; no solid food allowed: milk and soup the only nutriment. This treatment is further advocated by Dr. J. C. Lucas of the Bombay Medical Service (*Medical Times and Gazette*, Feb. 21, 1880) * * * * He places the dose at from 8 to 30 grains, commencing with the smaller dose and gradually increasing it as tolerance is established."

In the preface to this really valuable little work the author writes that "in making this selection (of bazaar medicines) I have been guided by the following principles: (1) By the safety of the drug; hence arsenic, aconite root (Bish), nuxvomica, Indian hemp and some other powerful medicines have been omitted, as it was felt to be inadvisable in a work like the present to introduce agents which, in the hands of unprofessional persons, might do more harm than good if employed in unsuitable cases."

It seems to me that the position here taken is exactly the one assumed by all opponents of opium, alcohol, hemp drugs, and other such injurious and poisonous but commonly used substances. These all should be so safeguarded as to prevent or minimize any possible harm resulting from their abuse. If any or all of them were made procurable in

only such form as would be best adapted to the medical work they are suited to perform, through the medium of a qualified chemist or the Government dispensaries, a great national danger would be removed, and such a patronage of the hospitals by the masses of the people would be stimulated as to soon place these admirable and eminently useful institutions on a self-supporting basis.

Oral evidence.

Question 1.—There are two Canadian Baptist Missions working in the country, extending from the Kistna in the south to the border of the Uriya country in Ganjam in the north and from the sea to the Ghâts. Before making the enquiries for the Commission, I had frequently met bairagis in the course of my evening preachings at the temples in the villages. These men would smoke and fall asleep while I was preaching, and on enquiry I learnt that it was ganja which they had been smoking. I used to see them wash and squeeze the ganja for smoking and pass the pipe round. There would be many disciples and poor people smoking with the bairagis on these occasions. These people were mostly Sudras. The higher castes and outcastes would not be among them. I remember that in my own village one of the men was a school teacher, one a carpenter, and several of them cultivators, and people of no settled occupation. These visits to the temples are the only occasions, with the exception of two cases I have described, on which I have been brought into contact with the hemp drugs. I have been six years in the country, and engaged in village work during four years. My enquiries cover the country served by both branches of the mission, and have extended over two months. Before entering in these enquiries I did not know the hemp drugs were in use among the people, and had only met with them in the temples. When I first saw the drug smoked at a temple, I did not know what it was, and thought it had some connection with the religious practices of the bairagis.

Question 19.—Since sending in my answers I spoke to a bairagi, who told me that men addicted to ganja would eat a handful of seed if they could not get the drug. He said that an intoxicating effect was produced by all parts of the plant, ganja leaves and seed as well, in whatever form they might be taken. I understood that the man had not eaten the seed himself, and of course I know nothing personally of its alleged properties.

Question 35.—My answer was written under the impression that the cultivation and possession of the drug was illegal, and my impression was derived from information given me by an Assistant Collector. But I have since learnt that there is no prohibition against cultivation and possession, and that a cultivator is only forbidden to sell the drug to any one but a licensed vendor. The practice to which I refer is growing the plant in back yards for personal consumption, and would not be illicit. But I hear that the drug cultivated in this way is sometimes sold illicitly, though not, as far as I have been able to discover, to such an extent as can be called trade.

As well as I could learn, it did not seem that the craving peculiar to ganja could be satisfied by any other drug. As a rule the various habits are distinct, but occasionally a man will practise more than one of them. My opinion that the prohibition of the drug would cause the practice to die

out is based upon (1) the fact that prohibition of intoxicating liquors has been largely effective in America where it has been tried, and (2) that the native character being amenable to authority, the people of the country, if once convinced that Government desired to put an end to the traffic, would co-operate with it, and (3) I believe the general sense of the people is opposed to the use of the drugs.

In the part of India with which I am acquainted the hemp plant does not grow wild so far as I have been able to ascertain. Of course, prohibition of the traffic implies prohibition of cultivation. How far this would be practicable in other parts of India I am not prepared to say.

Question 41.—The general opinion among the non-users is that the beneficial effects of the drugs are merely alleged by users as an excuse for a bad habit. It is the fact that the drugs are more used in malarious tracts, and probably the users do believe in their protective effects against fever; but I have been told by a man who had given up the use of the drugs that they do not possess this quality, and the general opinion of non-users is that I have stated above. The bairagi informant to whom I have referred above told me that the real object of taking the drug was to induce stupor, and nothing else.

Question 45.—In the case of the convert, my impression that the man went insane from ganja came to me from Dr. Leapingwell, who had charge of him in the jail and asylum. I knew he took ganja occasionally before I saw the doctor, for I learnt he had smoked when he returned to his village after he was baptized, and was locked out of his house and had his wife and child taken from him. I subsequently questioned the man, and came to the conclusion that he was a ganja smoker, but only indulged occasionally, not habitually.

In regard to my waterman, I have no evidence that he smoked ganja beyond the fact that he associated with bairagis at their periodical visits. He was evidently under the influence of some drug when he was violent, and it was certain that he had not taken spirits.

Question 59.—The position of our mission is that Government should not derive revenue from the vices of the people, or interfere in the traffic in liquor, opium or drugs, except in the direction of prohibition. I present herewith (1) a Resolution of the Conference of Missionaries of the Baptist Foreign Mission Board of Ontario and Quebec, Canada, comprising 28 members, working in a territory extending from the Kistna river on the south to the Vizagapatam taluka on the north; and (2) a Resolution from 772 of the 2,800 Native Christians of the above mission assembled in conference, both of which pray for the abolition of the traffic in hemp drugs. I think myself

justified in saying that the Baptist Missionaries of the Foreign Mission Board of the Maritime Provinces of Canada, as well as the Native Christians in their charge and the balance of our own congregation, hold the same opinion. This represents the opinion of our mission from the Kistna river on the south to the Uriya-speaking country in Ganjam on the north and from the sea to the Ghâts.

At the meeting of the Native Christians I invited any who had seen the hemp plant growing to stand up and state in how many villages they had seen it. Ten stood up and gave the names of 124 villages out of a possible 600. The persons who gave this information had not received instructions to make the enquiry, and, even if they had, they would not have been able to ascertain the whole extent of cultivation.

The Conference in India of the Missionaries of the Baptist Foreign Mission Board of Ontario and Quebec, Canada, comprising 28 members, under whose spiritual care and direction are 2,800 Native Christians, assembled in session at Samulkota, January 9th, 1894, unanimously passed the following Resolution for submission to the Indian Hemp Drugs Commission:—

Whereas the common consumption of hemp drugs by the people of these districts is in our opinion accompanied by sadly injurious effects, and whereas the habit appears to be on the increase, we would respectfully pray Government to take steps to prohibit the sale of these hemp drugs for common consumption.

Signed on behalf of the Conference.

J. G. BROWN,
Secretary.

SAMULKOTA, } H. F. LAFLAMME,
The 9th January 1894. } *Chairman.*

In the districts of Godaveri and Vizagapatam are 11 Baptist churches with a membership of 772 persons. We, the 40 delegates assembled at Samulkota in the Godaveri Association on the 5th January 1894, representing the above 11 churches, resolve that since ganja is a poisonous drug, and people using this as bhang, majum, and in some other forms suffer various injurious effects, we earnestly beg the Government to protect the people by abolishing the ganja trade.

On behalf of the Association.

SAMULKOTA, } B. SUBARAI DU.
The 6th January 1894. } M. JAGANA IKULU.

159. Evidence of the REV. J. F. BURDITT, *Missionary, Narsaravupet, Kistna District.*

1. Only second hand from intimate acquaintance with native people who have seen something of the use of the drug.

2. Ganja is here used to denote the crude drug, i.e., the flowering tops or rather the seed pods with the seeds extracted.

The juice of this (after abrasion and pressing through a cloth), mixed with milk, is called bhang.

The drug mixed with ghee and raw sugar forms majum.

The extracted juice mixed with the leaves of Tumna chettu (*Acacia arabica*), I am told, forms

enaras for smoking; but others say that it is opium that is mingled with the Acacia leaf juice and eaten.

3. None known to me.

4. One only hereabout—ganzi.

5. Good soil in plains.

7. (a) Yes.

(b) Yes.

(c) Yes.

(d) No.

Here and there a few plants for private consumption in certain sections, more extensively as a crop.

8. There is said to have been an increase owing to the profits derived from the culture.

9. Much the same as that for chillies. It is sown in seed beds and transplanted into fairly good soil and watered till it roots.

10. No. Yes.

11. Wild hemp is not available. The seeds of the cultivated is used.

12. No.

13. (a) Somewhat. It is most extensively grown in Dugubandu and surrounding country in the Hapatta Taluq and in the western part of the Narsaravupet Taluq.

(b) None apparently, but fairly good soil.

(c) No.

14. (a) Yes.

(b) Yes.

(c) Yes.

Privately and by licensed vendors in large towns.

15. (A) The seed pods are used for smoking.

(B) It is mixed with ghee and raw sugar.

(C) The juice of the ground pods is dropped into milk.

16. (a) Yes.

(b) Yes.

17. Muhammadans, sanyasis, etc.

18. The crude ganzi does not, but the preparations for drinking, etc., do. The charas becomes dry and does not give the desired fumes. The bhang being mixed with milk, would sour, etc.

20. Muhammadans and Telugus of all the classes, more or less, but sanyasis, etc., and itinerant priests, chiefly also the aboriginal tribes.

22. Native.

23. Not according to the local terminology used by my informants, who distinguish it as the drink preparation.

24. Not known.

25. Apparently on the increase.

The profit has stimulated cultivation and production, and accessibility stimulates consumption.

29. Ghee, belhum, acacia leaves. One to make palatable, another to increase the smoke and provide other stimulants.

30. Not known. It is, so far as observed, chiefly confined to the older men.

31. (a) Yes.

(b) Yes.

(c) Yes.

32. None known. It is said that the people of different castes will drink together out of the same vessel, if need be, making, as with medicine, no caste distinctions.

33. (a) As a disgrace.

34. It is difficult to break off. Hereabouts probably not more than one per cent.

35. (a) Gradually.

(b) Probably, as it is easy to do so.

(c) By making it penal.

(d) Certainly, though they might in the end be thankful.

(e) Consumers too few and uninfluential to make a political danger.

(f) Possibly, though as a rule, consumers of this are not habitual drinkers of liquor.

36. No. This is cheaper.

37. The effects of charas smoking seem to be mainly soporific; the ganja drinking more inclines to anger.

39. Answered above. The eating of the preparation marjimum has the most enduring effect, the unconscious state lasting for twelve hours or more. The smoking of ganja seems to make a complete stupor of shorter duration, and the drinking of bhang a less complete stupor and an inclination to anger if interfered with.

40. (a) Said to be to some extent.

(b) Not known.

41. (a) Said to be by consumers.

(b) Said to be.

(c) Not, so far as known.

Yes.

42. No. The injurious effects inducing weakness, inertia, listless incapacity, etc., far outweigh any reputed beneficial effects.

43. Said to be as a rule.

44. (a) Stupor, more or less complete.

45. (a) Physical weakness, leanness, cough, mental listlessness and eventual imbecility, moral loss of self-respect and self-restraint.

(b) Yes.

(d) It produces cough; whether bronchial or asthmatic, not known to writer. The former at all events, and it increases laziness.

(f) Leads to it. Imbecility in the end, but sanyasis, etc., are said to produce by its use a temporary frenzy simulating possession by the demon worshipped.

(g) I think it is the effect rather than the cause. Those who begin are, as a rule, sane enough except so far as the act is insane. As stated in the beginning, I have scarcely any personal acquaintance with cases, and have not had opportunity to observe these few while under the influence of the drug.

60. It does not seem to be sufficiently controlled, as the plant is undoubtedly grown privately in many gardens, etc., and freely used without any cognizance of officials.

68. I think not. Such encouragement and incitement to evil habits should by no means be allowed.

70. Considerable untaxed drug is used by those who grow a few plants for their own consumption and to give to sanyasis, etc.

155. *Evidence of the REV. J. HEINRICHS, Missionary, Vinukunda, Kistna District.*

1. Opportunities for obtaining information on this subject have been few. I base my remarks on the general knowledge I have concerning this matter, which is supplemented by that of others who are better informed than I.

2. Ganja as known in the Kistna district consists of dried flowering tops of hemp plants which have become coated with a muddy looking matter in consequence of having been unable to set seeds freely. This is the only article generally used in this part of the country.

Subji or patti is applied to the dried leaves of the hemp plant. Their use is not known here.

Charas means the muddish matter which is removed from the trees. When the hemp trees are full grown and ripe, they naturally become coated with resinous matter. Men dressed with garments made of skin will walk about closely in the midst of the trees, so that the resinous matter may thereby touch the garments. This gum is then scratched from the garments and will be sold for consumption. This is called charas. It is smoked and is said to have contained more intoxication than any of the articles naturally obtained from the hemp plant. The practice of either manufacturing charas or smoking the same is not at all known here. This kind of consumption is said to be applicable to Bombay Presidency and other northern countries higher up.

Bhang is not an article which can be naturally obtained from the hemp plant; but it is an admixture of dried flowering tops of the plant and some other products independent of the hemp plant. It is a liquid. It is not known that this preparation is also made of dried leaves of the plant; but it is presumed that as these leaves have less intoxicating power than the tops, this mode of preparing bhang is as well practised by occasional consumers.

Round and flat ganja are not known here. The only kind of ganja ever known in these parts is the flowering tops of the plant separated from the twigs and leaves. This is otherwise called "broken ganja" (gunja in Hindustani or ganjai in Telugu).

3, 4, 5, and 6. These questions pertain to the wild hemp plant, which is not grown in this district.

7. Yes to a limited extent in back yards and chilly gardens throughout the district. This consumption, however, is restricted to home consumption.

To a larger extent the plant is cultivated in Daggupad, Pasupad, Vunkalupad, and some other villages in the Bapatla taluq.

As far as this district is concerned, the cultivation is intended for the production of (1) ganja and (2) seeds.

The extent of land cultivated with the plant cannot be ascertained.

8. I do not know.

9. Where there is large cultivation of the hemp plant, the raiyats in the first instance raise seed-beds and water them till the seedlings are grown nearly half a yard high. They then uproot the seedlings and transplant them in land thoroughly ploughed up and manured for the purpose. The transplantation will be by furrows nearly one yard apart. After transplantation no mechanical water-

ings are necessary for the growth of the crop, but one of two rains will suffice. The above process is not, however, strictly observed where scattered trees are grown. Generally the seed-beds of the plant are raised in the month of August and transplantation in the month of September, and the crop will be ready for cut by the end of January or so.

10. No. They are the same as other agricultural cultivators.

11. No.

12. No wild hemp here, as far as I know.

13. The ganja plant is customarily cultivated in the abovenamed villages of the Bapatla taluq of this district. No special soil is, I think, necessary for the cultivation of the crop. Regada or clay or mixed regada will do for its growth. It can therefore be grown in all the dry taluqs of this district.

14. Generally speaking, ganja is prepared from the hemp plant, but bhang is very rarely prepared from it. Charas is not at all known here. There is no actual cultivation in these taluqs, viz., Sattanapath, Narsaraopetta, Vinukunda, and Puluand. And the actual extent to which the crop is cultivated in Bapatla cannot be ascertained.

15. No wild hemp here. The remarks recorded below pertain to the cultivated plant, which is known here as mulki or country hemp.

(A). Ganja.—The dried flowering tops of the plant (ganja) are closely rubbed up with the hands, mixing a little water with them, remove swelling water therefrom, and then it is mixed up with an equal quantity of tobacco, and then smoked with a pipe. This is called ganja-smoking.

Charas or resinous matter that was removed from the plant as stated against answer 2 is made up in small pills and then smoked up.

(B). Eating.—Ganja tops are washed and then pounded up with a small quantity of water till the matter takes the form of a gum. To this spices, such as car damoms, etc., are added. Then sugar will be mixed in order to sweeten the drug and then eaten in pills. This is called "majum-eating." There is another form of eating the ganja. The flowering tops of the plant are pounded after spices are added to them. This gummish matter is mixed with mutton or beef, which is boiled in the same way as curries are prepared and then eaten. This is called "bhang gosht" or "bhang dalli."

(C). Drinking.—The flowering tops of the plant are pounded and solved in water or milk to which sugar and spices are added; then the liquid is drunk. This is called "bhang" or "bhang water."

16. Bhang is very rarely prepared here. But it can be prepared from the hemp plant wherever grown.

17. The preparations of the drug are not restricted to any particular class or classes of people.

18. Bhang water cannot be retained very long. It must be consumed a few hours after its preparation, failing which the liquid will naturally produce a bad smell and will be unfit for consumption.

Ganja and charas can retain their ordinary

qualities for one year, but in the second year they lose their effect to a large extent, while in the third year they would be utterly useless. No means can prevent deterioration.

19. Charas is used only for smoking, but ganja for both purposes, smoking and eating as stated against question 15.

20. The use of ganja is not restricted to a particular class of people. The waddis or well-diggers use it perhaps more freely than any other class. Men of comparatively low moral status indulge in its use. Charas is not known here.

21. Only country ganja or charas is used in this district. Flat or round ganja is not known here.

22. No charas here.

23. Bhang is a liquid and cannot be smoked.

24. Bhang drinkers are very few in this district.

25. As far as my experience goes, the use of ganja seems to be on its decrease. Before the introduction of the ganja monopoly people were allowed to sell and possess the drug freely, and it was a sort of encouragement for them to indulge in ganja-smoking. But now, as departmental restrictions increased, the use of the drug decreased. Moreover, the drug is not procurable in every village as in former days, inasmuch as shops are allowed only in selected villages of much importance. It is said that most of the occasional consumers of the rural villages have given up the practice of ganja smoking, as difficulty was experienced in procuring the drug from distant villages where shops exist. After the introduction of the monopoly the drug is sold at a considerably higher rate than in former days. Hence the decrease.

26. Most of the consumers are habitual smokers of ganja.

27. See answer to question No. 20.

28. For ganja—

	Rs.	A.	P.
(a) For moderate consumers	0	0	2
(b) Excessive consumers	0	0	4 per diem on the average.

For bhang—This cannot be easily ascertained here, as none is used, but it is generally believed that more money is needed for this preparation because more ingredients, such as spices, are to be added in order to make it fit for consumption.

29. It is not known that dhatura is ever used along with any of these preparations made from the hemp plant. The following ingredients are ordinarily mixed up with the hemp drugs, as stated below:—(1) With ganja tobacco is necessarily mixed up in equal share before it is smoked. This admixture is intended to make the drug more wholesome than its being taken separately. (2) With bhang water, sugar and spices are mixed up so as to cause the drink tasteful. Milk or water is used according to the choice of the consumer. (3) With charas—not known. "Bhang massala" consists of the following ingredients pounded up together:—(1) Cloves, (2) cardamoms, (3) coriander seed, (4) poppy seeds, (5) coconut juice, (6) garlic, (7) ginger.

All these articles are pounded up, mixing with them an equal quantity of the flowering tops of the hemp plant. This muddy matter is called "bhang massala." It is mixed up with mutton and cooked up as common curries are boiled and roasted with ghee. This is termed "bhang gosht" or "bhang dalli."

30. The consumption of the three drugs is practised both in solitude and in company. Oftener the latter consumption is restricted to full grown males and more especially to worn-out and invalid persons. Neither children nor females use them habitually.

31. The habit of consuming ganja is generally formed in bad company.

32 and 33. Ganja smokers are generally regarded as of a morally bad character.

34. No.

35. As far as this district is concerned, it is not much difficult to prohibit the practice of ganja smoking. There may be some cases of illicit consumption of the ganja for a few years to come; but its practice may be gradually uprooted by imposing penalties on the offenders. Almost all the ganja smokers are people of considerably poor circumstances, and, moreover, their number is so small that there would be no reason to apprehend a political danger. Of course the prohibition may naturally occasion some discontent among the consumers, but that discontent would not in the least degree affect the political affairs. Further, the prohibition would not, I think, be followed by recourse to alcoholic stimulants or other drugs.

36. No.

37. I don't know.

38. Only broken or chur ganja is known here.

39. Not known.

40. It is said that ganja has some medicinal qualities. In hydrophobia, neuralgia, and some other nervous affections the use of ganja is said to have been attended by good results. Whether it is used in cattle diseases I do not know.

41. It is claimed that the smoking of ganja aids digestion and also alleviates hunger. In malarious and unhealthy places it is supposed to prevent disease. Most of the consumers are seen among invalid sepoys who practised ganja smoking when they were engaged on foreign expeditions.

42. I cannot consider even the moderate use of this drug harmless. Pernicious effects may not show themselves immediately, but they will eventually.

43. As a rule they are not offensive.

44. See note against No. 42.

45 and 46. As regards the effects of the use of these drugs, I may say that their use generally induces laziness on the part of the consumers. People who indulge in ganja smoking never like to work hard and appear to be physically weak in constitution. These drugs are not used as an aphrodisiac, but on the other hand it is said that the use of the drug tends to produce impotence. It is why men who dislike worldly affairs have been generally practising ganja smoking. Most of the ganja smokers are thus to be seen among bairagis, sanyasis, and fakirs, who have nothing to do with the worldly duties. A fakir with whom I had conversation the other day confirms the above fact. Moreover, the ganja smokers are generally dull and appear to be physically weak. It does not appear that the moderate or the excessive indulgence in any of these drugs incites to commit crime or violence, nor are they used by criminals to fortify themselves to commit a premeditated act of violence.

47. I believe it does.

48. I believe the evil effects to be proportionate to the use of the drug.

49. See answer against question No. 45. I do not know about prostitutes using this drug.

50. See against question 45.

51 to 54. See answer against question No. 45.

55. I do not know.

56. No information.

58 to 61. Unacquainted.

62. Yes, it could and should be controlled, and I believe it feasible. The best way is prohibitive, except for medicinal purposes.

63. The same objection as to the sale of opium, liquor, and any other poison. Government license first, then prohibition.

64. I know of no regulations.

156. Evidence of the REV. I. C. ARCHIBALD,* *Missionary Chicacole.*

Although I have had some nine years of residence in the country, the bulk of the questions I am unable to answer.

I have known several cases of persons who have gone crazy through the use of ganja and bhang.

A few days ago a young man was brought before P. A. Collector Partridge in a demented state. He believed fully the statement of the mother to the effect that her son had lost his mind through the use of bhang.

When in Tekkali, a town about 33 miles distant, in July I saw a man made crazy in the same way. He had been a fine-looking fellow, of considerable property.

Last month, when in Calingapatam, I learned on the best of authority of a case of a man who had gone mad through the same cause, but after keeping the stuff from him for a few months he had to a large extent recovered.

I know personally of two cases in this town of persons effected by these drugs in the same way. One was, years ago, a peon of our Mission School; the other is an old pensioned sepoy.

I deprecate the use of these drugs because of their injurious effects upon mind and body. I think their sale and use should be prohibited.

In these parts their consumption is not very extensive as yet, but it is on the increase.

157. Evidence of the REV. S. C. SCHABLE, *Missionary, Moolky, South Canara.*

1. The informations given below I partly acquired directly as an itinerating missionary during the visits I made now and then from house to house in the villages in the neighbourhood of Karkul and Moolky, and partly indirectly through some of our Christians who were once or are still accustomed to the use of bhang, and further on through the teachers of the Middle School. I am the manager of it. I beg leave to pass by some subjects which may be better explained by others.

2. Bhang is the vernacular name known to and used by all people here for *Cannabis sativa*; and it is the only narcotic plant of the kind grown here. The name is applied even to the gluten got by washing and squeezing the anthers of it. Ganja is the name used for the same plant, chiefly by Hindustani-speaking people. Siddia pattre is the third name applied to the same plant, but known only to the educated classes and bhang users.

'Bhang unde' is the name given to small round cakes prepared from a mixture of gluten of bhang and other condiments.

Majun is the name given to small flat cakes prepared from a mixture of bhang and some other things.

Subji is a kind of drink made from bhang and other accompaniments.

Charas is, as a few say, used to denote small pills of yellowish gluten got from the plant while growing. It is, however, not prepared in this part of the district, nor is it used by many.

The Natives enumerate three sorts of bhang

grown here. The first has a reddish stem, large and plenty of seeds, but has only a little of anthers and filaments. The second has a blackish stem, small, but only a few seeds and anthers and filament more than the first. By this they mean, it appears, the female plant. The third is the male plant differing from the first and the second only in having flowers and is consequently destroyed. There is also *foreign bhang* used, of which they name three different sorts as: (a) having a very small anther, (b) having big round anthers, and is said to be worse and more dangerous than the first; (c) Churki (machine) of bhang or Wynaad bhang.

3, 7, 14. It does not grow wild here and it is grown only to a very limited extent. As much as has come to my knowledge, some four or five people in every village will grow from 25 to 500 plants. From these plants they prepare the above mentioned four different sorts, viz., bhang, subji, majun and charas. The plant is never grown to the sole end for obtaining fibre and seed. (See, however, No. 40).

16. After the plant is cut, it must not be kept in the sun but under shade, i.e., under the roof.

19. Charas is said to be used for smoking purposes. It, however, cannot be smoked, but with a mixture of tobacco and bhang. Charas is brought here by some for private use from Bombay.

20. It appears that a small proportion of every class and caste, from the Brahmin down to the Pariah, is using ganja for smoking.

* Invited to attend at a sitting of the Commission for oral examination but failed to appear.

24. Bhanghi is everywhere smoked, eaten and drunk, but only in the houses of the users.

25. The bhanghi users are of opinion that there is an increase in smoking, eating and drinking.

28. To smokers it may cost (a) from 3 pies to 1 anna.

To eaters (a) 6 pies, (b) 6 pies;

To drinkers (a) 6 pies, (b) Re. 1-0-0.

32. No such custom in this district has come to my knowledge. Only once, some people at Moolky (actors in the Hindu theatre) are said to have worshipped the bhanghi huka with tom tom and music.

33. Every consumer readily admits that it is a bad habit, which sentiment has found an expression in a common saying about the consumption of bhanghi, which translated runs thus :—

He gave angī (coat),

Who smoked bhanghi.

And become a manga (monkey).

39. Smoking brings with it more evils than eating and drinking. This also has been formed into a common saying namely :—He who *eats* bhanghi flourishes, he who *smokes* it, is ruined.

40. Yes, they mix it with other drugs as medicine. Only the filament, not the leaves, is used as medicine for cattle. Seeds are given to

poultry, especially to fighting cocks to make them strong and bulky, and to newly bought pigeons to make them giddy so as to prevent them from flying away.

41, 42, 44. It produces, it is said, excessive appetite to beginners. Some people use it as a pain-killer, for instance, in cases of pain in the stomach. It must be said that there is harm in the habitual use of it whether moderate or excessive, especially in smoking. Even the moderate habitual use is enervating and deprives the consumer of his energy. Bhanghi consumers are generally spoken of contemptuously, being not to be relied upon and not to be trusted in. Such people will, it is true, do their work as long as they feel the effect of the drug, but as soon as this is over they get dull and unable to work. Bhanghi also stupefies its users to a high degree which I have found and when instructing such people. The users feel sleepy and timid immediately after the use. Eating and drinking makes one more timid, but more attentive and careful as they say, but it may also make a man debaucherous. According to my experience habitual bhanghi smokers lose their temper very soon, timid as they may be at other times.

49. Yes, they use drinking subji. If too much of cardamom and nutmeg be used, it will bring on debility. Constant smoking may also tend to the same end.

158. Evidence of the REV. E. UNANGST, * Missionary, Guntur, Kistna District.

The article called ganja.—(a) The preparation for smoking is called kalle here. The dense inflorescent part of the plant is divested of the leaves and seeds. A resinous exudation with some capsules is left. This is taken in the hand and washed. The colored water is poured off and fresh water added. This process is continued until the water remains uncolored. The washed resinous composition is then rolled into a ball slightly flattened. This is taken and mixed with tobacco in the proportion of one part of tobacco to two parts of the prepared ball. This is called patri. This is put into a pipe and smoked, the smoke being inhaled into the lungs.

This is the common preparation in use, and hundreds of people in Guntur make use of it.

The effect of this usage is a peculiar kind of intoxication attended with aphrodisiacal inclinations, and with exhilaration of the spirits and hallucinations, either pleasant or otherwise. These are followed by various narcotic effects, such as languor, stupor, sleep, symptoms of mental imbecility, loss of energy, sexual impotence, and after long indulgence in the habit, emaciation, vocal huskiness, depression of the chest, loss of appetite, insanity and death are invariably the result.

(b) An equal quantity of tobacco is mixed with the ball prepared as above described. This is also smoked and the smoke inhaled into the lungs. The narcotic effects of this preparation are very great. Two deadly poisons are contained in it, viz., nicotine from tobacco, and *cannabin* from Indian hemp. This form of ganja is not much used. Those who do smoke it die in a comparatively short time after becoming addicted to its use.

The preparation called bhang.—(c) The leaves, capsules and seeds in a suitable quantity are put

in water, which is boiled until the water becomes green. The water is then poured off. The remains are rolled into a pasty mass. This is mixed with poppy-seeds, black pepper, and dried ginger. The mixture is then pounded and rolled into a paste. This is mixed with milk or syrup, and flavored with cinnamon or other agreeable spices. This is then taken as a potion once, twice, or oftener during the day, as the preparation is only for one day. The same process is daily repeated by those who are excessively addicted to drinking bhang.

The effect of this drug is intoxicating, and peculiarly exhilarating in the presence of a brilliant light, or a blaze of fire. Predominant passions are sometimes manifest under its influence. The victim becomes hysterical.

(d) Another preparation of ganja is called mazum.

A ball is prepared as above described under ganja. This is taken and mixed with inspissated syrup. Small pills are made of this, and one is eaten at a time either at short or long intervals, as the consumer may prefer. The immediate effect is the contraction of the salivary glands, and consequent cessation of the salivary secretions for a short time. The intoxicating effect is in proportion to the quantity eaten. This form of ganja is much used.

In Guntur there are two principal shops or stalls for the sale of ganja. These are let by Government to two contractors, one paying Rs. 400 and the other Rs. 300 a year.

There are ten other places where the people meet to use ganja and its various preparations. These are public. But there are many private places where ganja and bhang are used, known only to, and resorted to by, certain intimate friends of those who occupy those places.

* Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

159. *Evidence of the REV. M. THOMAS, Missionary, London Mission, Vizagapatam.**Oral evidence.*

Question 1.—I have been fifteen years in this district. I have now four or five taluks with my head-quarters here. My sphere is east of the Ghâts from Toony to Vizianagram. It does not include the Agency tracts. I have only twice visited them. I have been in almost every village in my own district.

Question 45.—I have given the matter of hemp drugs very little attention until I was asked the other day. I had noticed the use among the bairagis at the chatrams (rest-houses) in villages, and had known one or at most two cases among the Native Christians. As regards the common people, the use of the drugs had not been brought to my personal notice in any way. I am therefore not prepared to say that there are any palpable effects on the people generally from the use of hemp drugs. I could not say the same of alcohol. I have seen much more of the effects of alcohol, *i.e.*, of drunkenness publicly. I cannot say whether the use of the drugs is less injurious than that of alcohol, for I have not seen enough of the use of the former to be able to institute a comparison. I have seen but very little of the drugs in the outlying villages; and generally speaking nothing of them. I have seen nothing in this part of the district that seems to call for Government interference. I am myself a total abstainer; but the London Mission does not make a point of total abstinence. Most of our Native Christians are total abstainers; but this is not made compulsory. I should not myself permit a

member of the church to use hemp drugs. I should strictly forbid it. If he did not obey I should not permit him to remain a member. I should not take the same course in regard to alcohol (spirit) provided that no effect came to my notice, and that the use was not a confirmed habit but only occasional. I should treat the use of opium precisely as I should treat the use of ganja. The reason of the difference in my attitude towards alcohol is that I think the drugs seem to affect a man more directly and markedly than alcohol. It is possible that this opinion may be due to the fact that I know less of the drugs and less of what may be moderate or excessive use, and may be therefore more apprehensive of the drugs. It may be less that I know the effects of the drugs than that I fear their being possibly very injurious. I cannot say whether there is any general impression in the country that the effects of the drugs are worse than those of alcohol. What I have been describing above is my own attitude, not that of the church, which as I have said, has not taken up the ground of compulsory abstinence. I have not discussed this matter with brother missionaries; and as I am far from our other stations I have not been at any conference for some years. I have only had to deal in discipline with one man; and he gave up the habit on admonition; and we had suspicion of another man. I have had struggle with one man about opium, but believe he has given it up. I have had to warn two or three persons about alcohol but never to dismiss a man.

160. *Evidence of the REV. GEO. PITTENDRIGH, Missionary, Free Church of Scotland Mission, Madras.**Oral evidence.*

Question 1.—I have been in India (entirely in Madras) for nine years. I am a Professor in the Christian College, and am Acting Secretary to the Free Church of Scotland Mission. For the greater part of the time I have been in Madras I had heard the name of ganja. I had heard it occasionally in connection with bandymen and coachmen, and so on, but I had (so far as I know) seen none of its effects. I had heard that they were similar to opium, a narcotic or intoxicant. That was all I knew. It was not till after I heard of the Commission that I made any special enquiry into the matter. I enquired first of Europeans and respectable natives, students and others, graduates and other men of some standing. No one seemed to know anything about it. The ordinary caste native seemed only to know in a general way that it was used by Muhammadans, bairagis, loafers, and ruffians. Europeans seemed to know nothing of its use. Afterwards I visited some of the places where the ganja consumers smoke. These places are near the shops, and I understood that they were places where people met as friends to smoke. I did not understand that they were licensed places. But they were frequented by consumers to smoke. One or two of my native agents discovered these places for me and took me there. They knew where to find them. I have visited only two or three. There are no doubt more. But I do not think there are many, as I had to go some con-

siderable distance to reach those I visited. There are, as far as I could find, four different preparations used—ganja, bhangatani, majum, and puranathi. Ganja is smoked with tobacco. I have heard of no other admixture. Bhangatani is boiled ganja with a mixture of rose, pepper, and poppy (I am not sure of the form of poppy). I understand that this is not the bhang of the north. It is prepared not from the leaf, but from ganja proper. I did not see the true bhang. Majum is a kind of sweetmeat of jaggery and ginger along with ganja. Puranathi is said to have seventy-two ingredients, and is nearly a pure sweetmeat. It is said to be nourishing. I gathered that there was a little opium in it. I understand that neither the ganja nor opium is there to any great extent. There is a great deal of sweet and spice. In the ganja haunts above referred to, only smoking of ganja goes on. In the shops I have seen bhangatani taken, a glassful asked for and drunk at once. I understand that all the forms of the hemp drug are sold in the same shop, but I cannot vouch for that.

I made enquiry as to consumption. My belief is that the drug is either not used by the respectable Hindu population at all, or it has no apparent effect on them. The most important evidence that I have for making this statement is the evidence of three doctors in the Mission: two are Europeans and one a native Christian. They tell me they have never come across the case of a single patient who used ganja so far as they

could see—that is, they never knew of any patient that he used ganja. If he used it, it had no effect on him that led them to suspect it. One of these three doctors—the native practitioner*—had, I believe, twenty years' practice, and had patients amounting as high as 20,000 in one year passing through his hands; over 16,000 a year for several years. He is present now in attendance in this building. I cannot tell what is the experience of these gentlemen as to alcohol.

The classes that seem to use hemp drugs most are bandymen, drivers of the native carriages, chiefly in the form of eating and drinking. In the form of smoking, the drug is used chiefly by Muhammadans and bairagis, and I am informed that the drug is taken in some form with milk, etc., by the caste population; but, if so, it is not to the extent of having any apparent effect.

As to effects, I should say that, of course, the drug is injurious if taken to excess. I have seen a little, but very little of this. I have questioned a number of smokers who have told me they have smoked for different lengths of time: from ten to (in one case) sixty years. These men looked practically all right, talked sensibly enough, and the main effects that I could discover (in the worst cases) were a certain listless look and glassy stare. In the younger smokers I could see no such effects. There seemed to be a good deal of fun in them. I cannot say that these were excessive smokers; but I found them in these smoking places.

Another recognized effect, *i.e.*, attributed to the drug by smokers, which one cannot see, is the great increase of appetite. I heard of one poor man who had to give up smoking because he could not afford the amount of food required. I never heard of special quality of food being required by the ganja smoker.

The moral effect is, I should think, bad. As far as I could discover, smoking at all events tends to destroy the will power. I am not sure about the other forms. I mean it tends to produce a lack of resolution and lack of interests in life. I examined men to see this, watching the look of the men, their eyes and hands. But, of course, I have not observed the development of this in any case. I did not keep men under observation. It does not seem here to lead to violence, but rather the opposite. The smokers claim to feel happy and never get angry. That seemed to me to be true, judging from what I saw of smokers. I am unable to say what the effect of the privation would be. I never saw that. It was never shown to me that the character of the smoker was irritable. What I saw was the contrary. My experience in this respect surprised me. Of course it is limited, too limited to permit of valuable generalisation.

All that I had said regarding the effects is based on the enquiry I had been making during the last three months, on observing and questioning the smokers themselves, and on statements made by the native Christian agents who enquired on my behalf. I did not enquire from the friends or relatives of smokers. But when I asked a smoker what the effects were, he could say, "it keeps me from anger." The smokers did not seem at all irritable. The chief immediate effect of use seemed to be a certain sleepiness and listlessness. As a rule, I did not see the same individuals more than once. I asked one bairagi why the bairagis used ganja so much. He said, they wandered about from place to place, and had often to use bad water. He said ganja removed the pain or ill effects of this. One man also mentioned the staying—power of the drug. No bairagi men-

tioned that the drug was good for concentration of thought. I have heard that stated casually, but not from a consumer.

All I have said about effects is in regard to smoking; for I have not seen any effects of eating or drinking the drug. I have not seen much of these uses, and have not been able to trace effects. I have seen no marked physical character—no emaciation—in any consumer of the drug in any form. The old sixty years' smoker was thin; but, then, he must have been nearly eighty years old. I rather think he had a cough, but it did not strike me at the time. I attributed it to age.

I have seen no cultivation in gardens or otherwise except stray plants growing apparently from seeds thrown away. My enquiries were confined to Madras. I understood that the people did not use these plants. They told me they could not get the ganja flower, and I understood that they did not use the leaf.

At first the smokers feared me. They at first thought that I was a detective; and, even when they knew who I was, they feared that I would give information to the police. They seemed also to know of the Commission and that 'padres' and others were collecting information, and they were shy of making statements. But after some talk they were free in talking to me. I surprised parties several times, and some bounded away; but they came back when they found it was my agent with me. In one case they stopped smoking altogether, and did not resume it.

My experience is that the ordinary non-consuming Hindu is not able to give one more information than a European. The only means he would have of knowing about smoking would be searching out smokers. Sometimes one sees smoking in the street, but one could not tell that it was ganja smoking. To smoke in one's presence is not regarded as respectful; therefore it would not be done in a casual interview. I have not to my recollection seen smoking in the street, but I have seen it actually at the back of houses.

I do not think that there is much ground for special interference on the part of the Government in anything that I have seen. But I think that there should be restriction in reducing the number of shops and the facilities for obtaining the drug. I say this because I have seen that it is certainly doing harm to a certain extent as I have indicated, and I have not been able to see that it is doing any good. I have heard of good medicinal effects; but as an ordinary article of consumption, I do not think it is doing good. I do not think it is doing the harm often attributed to it; but I think it does harm. I would have ultimate prohibition in view, if practicable. I think tobacco is not injurious; that is my opinion. I cannot say whether opium is better than ganja or not. I do not know enough to say whether its substitution for ganja would be an improvement. It might follow prohibition, but perhaps gradual restriction or prohibition would lead to curtailing the habit. Therefore, while I cannot say that prohibition should ever be actually adopted, I think it should be kept in view. If it lead to the use of alcohol, it would be doubtful if this would be any gain. Both in regard to this drug and other intoxicants, while I do not see my way to advocate total prohibition, I think the Government should seek to adopt such measures as may make it more difficult for men to go wrong, *i.e.*, to indulge to excess. I should regard increase of taxation as a perfectly justifiable means of carrying out this object, provided it would be effective.

* Mr. Itty (the gentleman referred to) stated that this statement was correct; that he never in his practice had a case of a patient suffering from the effects of the drug, though he had patients of whom he was told that they smoked.

161. *Evidence of the VERY REV. A. CHELVUM, Roman Catholic Diocese, Vizagapatam.**Oral evidence.*

Question 1.—I am 54 years of age and have been 34 years in Vizagapatam. I have travelled through this district and the neighbouring tracts; but my experience for the last twenty years has been confined to Vizagapatam itself, my congregation, and the St. Aloysius' High School, of which I am Head Master. I was born in Kaladgi, and brought up in the Bombay Presidency.

Question 20.—The consumption of the hemp drugs in Vizagapatam town is limited to very few people. Opium and country liquor are indulged in to a much larger extent. The hemp drugs are taken by Musalmans and bairagis and a few people from Orissa. The Musalmans who consume the hemp drugs are tailors, peons, chowkidars, pailwans, and men in service, as watchmen at private houses and public buildings. Perhaps two or three per cent. of the adult male population take the drugs. The commonest and easiest form of consumption is the smoking of the dried leaves like tobacco in pipes. Some make a cooling drink only of the leaves; but this requires a good deal of trouble to prepare, and three or four people join to make it up. Majum is also consumed, and women and children sometimes have the drug given to them in this form. I have also heard of charas being used, but very rarely. Charas is, however, dearer than the other forms of the drug.

Question 55.—The use of the drugs is not so prevalent as to render any further restrictive measures necessary, and the excessive consumers are very few. During the last twenty years I have occasionally travelled about the neighbouring country. The plant is very occasionally cultivated in gardens in this district. There is no regular cultivation. Such cultivation as there is could be easily stopped. The people don't care for the drug, and there would be no opposition if the cultivation were prohibited. In the remoter parts the poor people having no other stimulant would be inclined to grumble. They cannot afford to buy opium and liquor. I have not passed through any village in the interior since 1866, nor through the coast villages outside Vizagapatam for five or six years.

Question 41.—The hemp drugs are a beneficial

stimulant to the poor people and an alleviation of their privations. They serve the same purpose as opium. The hemp drugs in moderation are sedative and anodyne, and are used for medicinal purposes. This is the way in which they are generally used. The excessive use is not common. It is resorted to principally by worthless people and ministers to their passions. It is stupefying, and renders the consumer unfit for work, and sometimes almost mad. There might be a dozen people in this town who use the hemp drugs to excess.

Question 45.—I have come in contact with ganja consumers enough to know their general appearance. They have red eyes, are lazy and listless, are constantly yawning, and are pale and unhealthy-looking. These are excessive consumers. The moderate consumers could hardly be distinguished from other people. They can be with difficulty distinguished. The moderate use is beneficial. Their appearance has no marks of superiority. The drugs are beneficial to them, only if taken in the form of refreshing drink. In other forms the drug is not beneficial apart from its medicinal use. Alcohol in moderation contributes to health by refreshing and relieving the mind and body. I regard alcohol as better than bhang. Excess in either bhang or alcohol is equally bad. Excess in ganja smoking is worse than both, because I am told, though I have no experience of it, that it affects the brain. I should receive either a spirit drinker or ganja smoker into my congregation. If he were given to excess, I should inculcate moderation.

Question 53.—On rare occasions I have heard of the excessive use producing great excitement and violence; but, according to my own observation, the effect is to render a man senseless. I have seen a man in such a state of excitement that he was ready to commit an act of violence, but disabled by being unable to control his limbs. I saw a sepoy in the 7th Regiment at Jalna in this State. That was when I was a boy of twelve years of age. I have seen no such case during the last twenty years. I remember having had to deal with a case on the bench of Magistrates in Vizagapatam in which a "wastad" had committed a violent assault, apparently under the influence of hemp.

162. *Evidence of S. P. NARASIMMALU NAYUDU, Editor of the "Crescent," Coimbatore.*

1. From one of my tenants, who is too much addicted to the drug for a very long time, and his comrades.

2. The definitions given may be accepted, with the exception of charas, this description of the drug not being in use in this province.

The names used here are thattai or javadi ganja for flat ganja, mulki ganja for round ganja, and thul or bhukni ganja for broken ganja.

7. There is no regular cultivation of the plant in the district as far as I know; but it is grown sparingly in some gardens for distribution to bairagis, etc., as charity for use as bhang.

8. No.

9. Nothing particular.

10. No. Yes.

11. Not known.

12. Not known.

13. The cultivation is restricted. Not known.

14. The use of ganja and bhang is very limited in this district and sold in sweetmeat bazars and by native quacks.

15. No distinction is made in this district between cultivated and wild plant. (A) Smoking —Two-thirds ganja and one-third tobacco mixed

together and smoked in the pipe called chillum. (B) eating—the drug is washed five or six times and then mixed with sugar, poppy and spices; and (C) drinking—same as above, with cocoanut or cow's milk.

16. (a) The bhang is prepared generally by the people in their houses. (b) and (c) Yes.

17. Only by the people using the drug.

18. Ganja, as it is, can be kept for a long time and the preparation of the bhang should be used then and there. The ingredients composing it deteriorate it. Not known.

19. *Vide* answers to query 15.

20. Rajputs and Musalmans are the principal classes who use ganja. Twenty per cent. of these classes are likely to use the drug. Other classes very rarely use it.

21. Any ganja is used for smoking.

22. Not in use.

23 and 24. *Vide* question 20.

25. Decreasing owing to the restrictions imposed by the Abkari Department.

26 and 27. As the drug is sparingly used in this district, the information cannot be given.

28. (a) Average three pie or quarter anna, or half tola. (b) Two annas (24 pie) ganja, or four tolas.

29. Ordinary people use equal quantity of tobacco. Habitual people mix double the quantity of tobacco. Opium is also mixed with at times to add power.

The ingredients of bhang massala are:—ginger, pepper, poppy-seeds, cocoa, cloves, nutmeg, sombu, milk, sugar, etc.

30. A small quantity in solitude or a large quantity in company. In these parts, males alone generally use it. Females and children rarely use it.

31. (a) Yes. (b) Yes. (c) Yes. It depends on the society he moves in.

32. (a) Some people use it during the marriages, and some during Holi or Kama feast or Pandigay. (b) It is not essential. (c) At times temperate, at times excessive. (d) Yes.

33. (a) Considered as very mean by the majority. (b) No. Yes; generally disrepute, because it produces laziness, etc. (c). The plant is not worshipped in these parts; but the plant is tied on both sides of *karady*, while people carry them to Palany temple, etc.

34. Yes; it may prove a serious privation only to those bairagis who come from Northern India. Next to impossible.

35. (a) It is very difficult to prohibit the use all of a sudden. (b) Yes. (c) By the introduction of a law according to the climate and condition of the country. (d) It may at the commencement to a very small extent. (e) No. (f) Yes.

36. (a) Yes; for the sake of stimulant. The habitual smokers say so.

37. Yes; charas gives more stimulant than ganja, etc.

38. The effects are the same in all three kinds. It depends on the fancy of the user.

39. Yes; smoking affects the brain, while eating and drinking affects not only the brain but also the body.

40. (a) Yes. (b) Don't know.

41. Yes.

(a) Yes.

(b) Yes.

(c) Yes.

All classes of natives.

42. The moderate use may be beneficial, but gradually leads to excess.

43. Yes.

44. (b) Yes. (c) Yes. (d) Yes. (e) Yes. (f) Generally it lasts for an hour or two and according to the constitution. (g) Yes.

45. (a) Yes.

(b) Yes; when he has not been properly fed.

(c) Yes.

(d) Yes.

(e) Yes.

(f) Yes.

49. (a) Yes.

(d) Yes.

53. Yes.

54. No.

55. (a) Yes, in the case of beginners.

(b) Yes.

56. The effect may be caused by purifying it.

57. Charas has more power, but it is rarely used in this part of the country.

58. I consider it gives trouble to the people.

59. By employing good and honest men.

60. It is not properly controlled. It requires modification by the introduction of a stringent Act.

62. Yes. Yes. By the supervision of Tahsildars and Revenue Inspectors.

63. Yes. There is no check on the licenseholder whether he sells good or bad stuff to the consumers.

65. It is said that the present tax on ganja, etc., is rather higher than alcoholic or other intoxicants.

66. Yes; according to the quality.

68. No public dens in the town.

69. No. No. Yes.

70. No

163. *Evidence of N. KOTHUNDARAMAYYA, Brahmin, Editor of "Suneeti" Rajahmundry, Godavari District.*

1. I have consulted some people who use ganja. I have experimented myself by smoking ganja and drinking bhang.

2. Charas is here known to be kalli. Ganja means ganja leaves, dried ones. Flat ganja or ada is sold here. Ganja is known by the names

ganjayi or patri, or basavapatri, or gnanapat (wisdom leaf), that is, ganjayi is generally known to be ganja leaves (dried), charas by the name of kallis.

People who generally buy ganja want kallis, but not leaves.

5. They say black cotton soil and islands formed in the rivers.
7. (a) Vadapalli, Koovur, and their adjoining villages, and some villages in our district.
10. They are of the same classes as other agricultural cultivators.
13. There is no restriction.
14. There is preparation of charas.
15. Ganja is prepared for smoking in the following manner:—The smoker takes a few charas or kallis, generally of the weight of one pie, puts in the palm of one hand, mixes it with a little water, and presses or grinds with the thumb of the other hand, and then lets the superfluous water, if any, drop; then mixes it with tobacco of the weight of $\frac{1}{3}$ pie, and puts the lump in the chillum (smoking pipe made of earth), and also a little fire, and inhales the smoke.
16. Bhang is prepared in their houses, of ganja leaves. Leaves of ganja plant, wild or otherwise, are used in preparing bhang.
18. For one year ganja keeps good; afterwards its effects are gone.
19. Ganja and charas (kallis) are used for smoking.
20. Brahmins, goldsmiths, Musalmans, Sudras. They form very little proportion. Smokers are found both in our town and villages of our district.
21. Flat ganja means seeds and leaves, which is prepared here for smoking.
22. Charas or kallis or flat ganja is imported to this district from Daggupader in Kistna district.
23. Bhang is never used for smoking, but very poor people may do so sometimes.
24. Very few drink bhang.
25. Very little increase.
26. (a) Great proportion.
(b) Small proportion.
27. Bairagis, sanyasis, fakir, vagabonds; retired people. Indolence, or devotion to God, or resignation of worldly pleasure leads to such practice.
28. (a) From one pie to half anna.
(b) About one anna.
29. Ganja leaves, dry ginger, pepper, poppy seeds, cow's milk, all in equal parts, are the ingredients of bhang.
30. In solitude the drug is used in limited quantities, perhaps about the value of 6 pies; but in company more—not less than one anna worth ganja.
31. This habit is easy to acquire, and easy to break off, and has a tendency to develop into the excessive.
32. There is no custom (social or religious) in our district regarding the use of any of these drugs. It is generally temperate.
33. The public opinion (social and religious) is that the use of the drug is bad, and the consumers to be looked down upon with disrespect. The sentiment is due to the bad effects of the drug. There is no custom of worshipping the hemp plant here.
34. It would be a serious privation to those who are long accustomed to the drug, for they get cough on breaking off the practice. The number is small.
35. Prohibition should never be enforced, although there is no political danger by interfering with the consumption and prohibiting people. The prohibition would never be followed by recourse to alcoholic stimulants. The drug would be consumed illicitly. The only way of prohibiting would be to publish pamphlets in the vernacular and explain to the people.
36. There is no substitution of alcohol for this drug in our district.
38. Flat ganja has good effects, and consumers generally buy flat ganja or kallis.
39. Drinking (bhaug) is less injurious than smoking ganja.
41. (a) They say digestive (bhang).
(c) They say bhang prevents malarious diseases.
(d) Bhang prevents bad effects of unhealthy water.
- Bairagis and sanyasis use the drug with a belief that they will not be subject, in their wanderings from the Himalayas to Rameswaram (Cape Comorin), to the bad effects of different climates and waters. Moderate use will do good.
42. Very moderate use of bhang is harmless, for it improves appetite and prevents disease.
43. Moderate consumers are quite inoffensive.
44. The immediate effects of the use of bhang is a little intoxication and improves the appetite. Ganja smoking creates hunger and produces intoxication. The effect does not last long. Want of subsequent gratification does not produce any serious longing or uneasiness.
45. (a) Moderate use does not produce noxious effects.
(b) No.
(c) No.
(d) Produces a little bronchitis.
(e) Induces laziness, but not immorality.
(f) Deadens intellect generally, but not permanently. As for insanity, the use of the drug is not the sole cause. Generally the poverty of the consumer and his previous indolent habits, ignorance of sanitary rules, and such other things are the causes. The consumer of the drug, if he eats well, will be always strong and healthy.
46. Excessive habitual use, if the consumer has plenty to eat, does not injure him so much.
49. The consumer of the hemp drug does not become impotent, but the use being generally in connection to devotion to God and other sacred things, the consumer does not care for cohabitation, but on the whole the drug has a tendency to make them long for cohabitation.
51. Moderate use does not bring about crime or any special crime.
52. Excessive use does not induce crime, but the poverty of the consumer and his previous bad character induce him to pilfer, but not to commit any serious crime.
53. I have never known or seen any person incited to violent crime or homicidal frenzy.
63. I have no objection to the present system, wholesale or retail. Excessive consumers who are found or certified by the doctors to have grown mad, or stupid, or violent on account of the use of the drug solely, may be put in jail for some time till they forget the use.
64. I have no objection either to exporting or importing of the drug, but the educational depart-

ments or social reformers should explain to the people the real effects of the drug.

65. Taxation, as heavy as possible, is reasonable and necessary with reference to (a) and (b), for that will clearly show that the Government does not encourage any such drug or any other spirit, but at the same time does not wish to wound the feelings of its subjects by prohibiting them or countenancing any use of such drugs by freeing them from taxation or putting any indirect restrictions upon them. It would be the best and most healthy policy of the Government to impose the heaviest possible tax on the most consumed kind of the drug. If ganja is most consumed in

a special locality, there the tax should be heavy. Where there is no great consumption, there may be moderate taxation. Anyhow, there should be taxation, heavy or low, in all localities.

67. I shall not object even if the consumer be taxed more than at present.

68. There is a shop in our town. I have nothing to say against it. The shopkeeper does not induce anybody.

69. It is good that the local opinion be sought and the smoking rooms be kept as open and public as possible. The shop in our town ought to be more public and more open to public view.

164. *Evidence of K. VEMATASOORIAH, Veishya, Trader and Pleader, District Munsiff's Court, Cuddapah.*

1. A shareholder of mine had taken the ganja farm of this taluk three years ago. The facts brought to my notice then, and my own observations when I had been to Gendicota, in the Jammalamadugu taluk, occasionally to my relation's house, and my enquiries of persons who actually use the drug, have enabled me to answer some of the questions.

2. These definitions cannot be accepted for this district. Two varieties are sold in this district, called nur ganja and mathy ganja, the former being male and the latter female. Female ganja is not however grown, so far as my knowledge goes, in this district, but is imported from Bezvada, Kurnool, and other districts. This is also known by the name kasy (graft) ganja.

7. (a) Yes.

(c) Yes.

In villages of Jammalamadugu and Cuddapah taluks; but not to a very great extent.

8. There has been some decrease in the area under cultivation, the sole reason being that the produce, which is not very considerable, to be exported does not sell at a profitable rate locally.

9. The cultivation of the plant generally resembles raggi cultivation.

10. The same classes as other agricultural cultivators.

11. Not so far as my information goes.

13. The cultivation does not seem to have been restricted. The plant cannot be cultivated in saltish (chowdu) soils.

14. Ganja and bhang are prepared in this district from hemp plant to some extent.

15. I know nothing of the wild plant. From the cultivated plant (A) the flowering tops (known as kully locally) are rubbed in the hand with water till the green colour is removed and then mixed with tobacco. This is the preparation used for smoking. (B) After undergoing the process for removing the green colour, it is mixed with pepper and dry ginger and made into balls. There is another preparation called majum for eating. Leaves or kullies are boiled in water, fried in a pan, and reduced to powder. This powder is mixed with jaggery syrup and made into balls. (C) The kullies and leaves are boiled in water and washed till the green colour is removed; then ground with poppy seeds, pepper, and dry ginger, mixed with sugar and some plantains by some people and filtered. The essence is mixed with milk and used for drinking. This is what

is called bhang. If however only pepper and dry ginger are used, the preparation is called subji.

16. Yes; it is prepared in houses.

17. By Musalmans in this district, but some vagabonds, called bairagis, seem to make the preparations and use them.

18. Yes; it is said the preparations lose their effect if kept for some time. Bhang can be kept in good order for half an hour and ganja for quarter of an hour. But majum, mentioned in 15th question, can be kept for a number of days.

19. Refer to the answer to the 15th question. My answers refer only to Cuddapah district.

20. In this district Musalmans smoke ganja.

21. In this district round or chur ganja, called baluchur, is preferred for smoking.

24. In this district only Musalmans mostly eat or drink ganja or bhang.

27. Their habits are dilatory.

28. (a) One pie each time, i.e., quarter of an anna a day.

(b) Six times the cost.

30. A number of idlers consume more in company than in solitude. It is generally confined to the adult male sex generally above sixteen years of age.

31. One addicted to it will not, I have observed, break it off.

33. From the fact that people addicted to the use of the drug are ashamed to confess it, it is deducible that they look upon it as no virtue, and from my own observation of the consumers I have been able to gather that people have recourse to the drug as a luxury.

35. It is necessary to see that people do not take to this drug; but ordinary prohibition may induce the consumer to illicit means. Besides the people in this district, who, I believe, are harmless, I have had occasion to observe many irresponsible and responsible persons in the North-Western Provinces are addicted to the use of the drug, and it has to be considered if the prohibition is likely to occasion serious discontent amongst them. I believe there is no room for an inference that the prohibition is necessarily followed by recourse to alcoholic stimulants, etc.

39. It is said that smoking is more injurious than eating, which is, however, more injurious than drinking on account of the admixtures.

40. By Muhammadan and Hindu doctors it is prescribed on account of its medicinal qualities.

43. Yes; they are harmless.

45. (e) I think, yes.

(f) I have had some servants who smoked the drug, and from my experience of them I believe it deadens the intellect.

68. There are licensed shops for the sale of the leaf and flower tops; but they are not consumed

there, as they have no license for the preparations, which can only be done by the consumer. I am of opinion that there should be no shops for the sale of the prepared drug, as it is likely that a number of idlers will be collected there to consume the preparations.

69. There is some enquiry made before a shop is opened in any locality, and it is absolutely necessary that public opinion ought to be considered.

165. *Evidence of GANJAM VENCATARATNAM, Brahmin, 1st Grade Pleader, Coconada, Godavery District.*

1. I am a Pleader of 13 years' standing. Since I have been asked to give evidence in this matter, I have paid some attention to the subject and made certain enquiries from persons likely to give me information, and the results of my enquiries are embodied in my answers. But I must add that I have no special knowledge of the subject.

2. The definition of "ganja" herein given may be accepted as applicable to the drug, locally known as "ganjai plant," raised in or imported into this district. The term "charas" is unknown here.

3. I don't know of any district in which it is grown spontaneously. But the plant is grown to a very limited extent for purposes of consumption in the Kistna and Godavery districts, as far as my information goes.

4. The only name by which it is known in these parts is "ganjai drug." What is produced in the hill tracts goes by the name of "manyapu ganjai," and what is raised in the plains is called "dhesavali ganjai."

5 and 6. Cannot answer.

7. There is nothing like cultivation of the hemp plant in this district to which my remarks apply. It is however grown here and there for purposes of consumption, generally by Musalmans, in their back yards.

14. Ganja and bhang are prepared from the female ganjai plant, either raised in this district or imported from other places. But this obtains here only to a very small extent.

15. There appears to be no distinction between the methods of preparation of the cultivated and the wild plant. The methods of preparation for smoking, eating, and drinking are not uniform and differ in certain respects.

16. (a) Yes.

(b) Yes.

(c) Yes.

17. By fakirs and ascetics known as bairagis, by certain Musalmans, and by some lower classes of Hindus, especially by the class of people known as Bondhilis.

18. It keeps good for three years, and loses its effect and gradually deteriorates after that period, apparently from the same causes as tobacco deteriorates in time. But the plant produced in the hill tracts is said to deteriorate more rapidly, that is, in less than a year after its production.

19. Ganjai is used not only for smoking, but also bhang, majum, and halwa are prepared therefrom with the mixture of certain substances. Bhang is used for drinking, and majum and aulwa are eaten.

20. Almost all the bairagis, a few Musalmans, Bondhilis, and Sudras smoke ganjai or use its mixture in this district. The better classes of Hindus or Musalmans are free from this practice, and the people who resort to it form a microscopic minority, not even 1 per cent. of the population.

21. The three kinds of ganja appear to be in use in these parts. Round ganja is said to be preferred for smoking purposes.

23. I am not aware of its being used for smoking.

24. *Vide* my answer to question 20.

25. The use of ganja and bhang is said to be on the decrease since the Government placed restrictions on the cultivation of the plant. The value of the drug in the bazaar is now almost doubled.

27. Bairagis are the only class of people that use the drug, and they believe in its efficacy to lessen sexual desire. Others get into the habit, in the majority of cases, by their association with bairagis, and some of them believe also in its medicinal properties. Their habits of life are not active, and society looks upon them as unsteady characters.

29. Pepper, "maratimoggalu," cloves, and other kinds of spices are the ordinary ingredients forming the mixture. Dhatura is also used in some cases. The object of these admixtures is to increase the intoxicating effects of the drug to a greater or less degree.

30. The consumption of the drug is generally practised in solitude. It is entirely confined to the male sex. Once a person gets into the habit, it is difficult for him to give it up at any time of life, and it becomes a life-long habit. It is unusual for children to make use of any of these drugs.

31. It is only weak-minded people who associate themselves with bairagis that generally fall into this habit in these parts. There may be no difficulty in breaking it off; but, if we appeal to experience, we find that confirmed users seldom withdraw from the practice. There might be no such tendency in the drug itself; but the habit, though moderate in the beginning, may lead to excess in course of time.

32. No such customs are prevalent in these parts.

33. Public opinion here condemns the practice, though not to that extent as the use of alcohol or other intoxicating spirits is condemned. If anybody belonging to these parts who goes to Benares or other places in the north and stops there for any length of time should contract the habit, he tries to give it up as soon as he returns to the country, being afraid of public opinion.

There is no custom of worshipping the plant here.

34. I do not think that it would be a serious privation to any class of consumers, excepting perhaps the bairagis, to give up the habit.

35. I do not think it necessary or expedient to prohibit the use of these drugs in these parts, as the use thereof obtains only to a very small extent, and as public opinion acts as a sufficient deterrent. Practical difficulties also arise in enforcing the rule of prohibition, and such a stringent measure is likely to lead to illicit consumption, and may be followed also by recourse to alcoholic stimulants and the like. I do not believe, however, that it would lead to any serious discontent amounting to political danger; but, if such measures are to be adopted, I would strongly suggest that the Agency tracts may be entirely excluded from their operation.

36. No.

39. It seems to me that smoking ganja must be less injurious than drinking or eating its admixture, especially the admixture of dhatura, inasmuch as the substitutes forming the mixture have the tendency to intensify the intoxicating effects of the drug.

40. Yes; it is prescribed as a medicine in cases

of dysentery. I am not aware of its being used in the treatment of cattle disease.

41. The moderate use of ganja is believed in some quarters as tending to increase the powers of digestion and prevent disease in malarious and unhealthy tracts. All classes of people treated by native doctors occasionally use the medicines prepared from these drugs.

43. Yes.

44. It produces intoxication and creates appetite. The want of subsequent gratification produces uneasiness.

45. It impairs the constitution, lessens sexual desire, deadens the intellect, and produces also insanity in some cases, though they are few and far between.

46. I have heard of a case where the excessive use of the drug for a period of five or six years has brought about insanity.

47. No.

49. No. The use of the drug has a tendency to produce impotence.

51. No; it has nothing to do with crime.

53, 54 and 55. No.

56. Effects will be increased. Dhatura is also mixed in a few instances, and its effects are very strong.

166. *Evidence of VISWANADHAM GURAVAIAH SASTRI, Brahmin, Pleader and District and Taluk Board Member, Chicacole.*

1. I meet those that are accustomed to the use of ganja and bhang.

14. Ganja and bhang are prepared in this district, especially in Uriya parts.

16. Yes. Bhang is prepared in houses.

19. Ganja and charas are used for smoking.

20. Ganja is smoked by Uriya bairagis and other constant travellers. Charas is used in smoking by Muhammadans in all places.

24. Bhang is drunk by all classes in all places, to a great extent. Eating less prevalent.

25. The use is increasing. The recognition of the Government of the sale of those drugs in open markets is, in my opinion, the sole cause of the increase.

33. The use of ganja and bhang is regarded as a habit. In societies, men of these habits are not generally allowed. In the view of religion it is objectionable, for it affects the nervous and muscular system of the body.

39. Smoking seems less injurious.

40. Native doctors use ganja in preparing

certain medicines, called halwas, for curing indigestion, sleeplessness, and impotency.

42. It is not harmless.

43. Yes.

44. (a) Drowsiness.

(b) No.

(c) Yes.

(d) No.

(e) Yes.

(f) For a few hours.

(g) Yes; sleeplessness, debility, and loss of memory are the results.

(h) Yes.

45. (a) Yes.

51. (a) Yes.

(b) When the consumers exhaust their purse, they would have recourse to stealing.

53. Yes. No; I do not know.

55. (a) Yes.

(b) Yes.

167. *Evidence of B. CHATTERJEA, Brahmin, Pleader, District Court, Ganjam, and Chairman, Berhampore Municipality.*

1. I have been over various parts of India, and have been in this district off and on for 13 years. I have known personally many persons who smoke ganja and charas and drink and eat bhang.

3. In the Ganjam district the hemp plant grows spontaneously on the hills in abundance and in a limited quantity in the plains.

14. Ganja and charas are prepared to a great extent in the Segoli district on the frontiers of Nepal and Behar. Ganja is also prepared largely in Sultanpur.

16. (a) Yes.

(b) Yes.

(c) Yes.

19. Mainly, so far as I have known, for smoking. Ganja is sometimes mixed with bhang and drunk to intensify the intoxicating power of the mixture.

20. Almost all classes, and notoriously religious mendicants (hairagis) and professional singers, smoke ganja. Ganja is smoked all over India, but I have not seen any use of charas in the Madras Presidency. Ganja and charas are used extensively in the North-Western Provinces and the Punjab.

24. Within my experience, eating and drinking bhang are common in the North-Western Provinces and the Punjab. In the Puri district in Orissa drinking bhang is a confirmed habit with many people. In Ganjam the habit is rare.

25. On the decrease to some extent, since the lower classes who mostly use these intoxicants have taken to the habit of drinking liquor.

28. The average cost of ganja and charas would be about two annas and that of bhang half an anna.

32. In Bengal there is the religious custom of drinking bhang on the Vijaya Dasami (Dasara) day. Saivas offer ganja to their deity and smoke it afterwards.

33. In respectable society the use of ganja and charas is looked upon with some degree of aversion. This is owing to bad temper caused by ganja and to a notion that the smoke of ganja scares away the goddess of fortune.

40. Ganja and bhang are used by many native doctors in the preparation of sweet boluses for improving appetite. Bhang is prescribed by some for dyspepsia.

41. In the case of those who live by hard physical labour, the use of ganja and charas refreshes the system. Bhang acts only as an appetiser, and is more or less harmless.

43. Yes so far as I know.

44. Ganja and charas are refreshing. All these produce intoxication. Ganja and charas allay hunger. Bhang creates appetite. The effect of bhang lasts for not less than 12 hours, that of ganja and charas from 2 to 3 hours. There are no after-effects. The want of subsequent gratification produces a longing, but no marked uneasiness.

45. In strong constitutions noxious effects are not markedly perceptible as in weak constitutions.

Bhang creates indolence and slightly dulls the intellect and moral sensibility.

Ganja acts injuriously on the nervous system, inflames the temper, and weakens the sense of moral responsibility. I know a relation of mine who from the most dutiful and obedient of sons came to be self-willed, wayward and disobedient, and not amenable to any control, all through the moderate use of ganja. Charas does not injuriously affect the temper, but has in other respects almost the same effect as ganja.

49. Yes; bhang is so used.

51. Yes, of bhang.

53. Yes; I know of a case which came for trial before the Sessions Court of Ganjam. The murderer was an immoderate smoker of ganja, and in a moment of temporary homicidal frenzy committed one murder and threatened to commit more when he was apprehended by the police.

54. Yes, by bad characters who lend their services for hire in the North-Western Provinces.

55. Yes; bhang is administered to intended victims, and the dhatura is mixed to induce complete stupefaction.

168. *Evidence of P. C. ANUNTHACHARLU, Brahmin, Chairman, Municipal Council, and Government Pleader, Bellary.*

1. I have had no special opportunities of obtaining information on the subject. I have observed the growth of hemp plant in some places, and have noticed the effect of ganja on people who have habitually used it.

2. The word charas is not known in this part of the country.

Sidhi, bhang, and sabji are used to denote the dry leaves of the hemp plant.

This definition of ganja may be accepted for this part of the country.

Sabji is also known by the name of Ram Ras.

Flat ganja is manufactured in Madras and the southern districts, and not in the ceded districts to any very great extent.

Round ganja is manufactured in the Bellary district.

The definition is wide enough for this district.

3. Hemp plant does not grow spontaneously in abundance in this district. It grows spontaneously on the Nullamah hills in the Kurnool district, but not in abundance. It grows also on Bhana Buddin hills in Mysore territory.

4. It is known by the names of ganja plant and bhang plant.

5. I cannot answer this question. I know that

dew has good effect on its growth. Black soil is well suited to its growth.

6. Only scattered in the places mentioned above.

7. Hemp plant is cultivated to a very small extent in the Bellary district. It grows in black soil. It is a nine months' crop (Moongari crop). The flower top becomes ripe in the sixth month. It is grown in sugarcane and brinjal gardens in some parts of this district.

8. No considerable or appreciable increase or decrease.

9. Much water is not necessary. Generally rain water is sufficient.

10. No. They are of the same classes as other agricultural cultivators in this district. In Dag-gupadu and other villages in the Kistna district, there are, I understand, special classes who cultivate this.

13. Ordinary rainfall is sufficient. It is cultivated in black soil.

14. (a) Yes.

(b) No.

(c) Not made. The leaves are used for making sabji.

15. Wild plant is not much used in this part

of the country. The flower top of cultivated plant after being squeezed is smoked with tobacco. Majum is made from the flower top. This is eaten. Panakum is made for drinking. This is rather expensive and rarely made.

16. Bhang is generally prepared by people in their houses and very rarely in shops.

17. No particular classes. Generally by the lower classes of Hindus and Musalmans.

18. Ganja keeps well for one year. It becomes useless after two years.

20. Charas not known here. Bairagis smoke very largely. Boyas, Kurubhas, Musalmans, and some other lower orders make ganja. Brahmins and other higher classes rarely smoke ganja in this district.

21. Round ganja is used in this part of the country.

22. Charas not known, not used.

23. Bhang is not used for smoking. There is very little intoxication, if any. It is imported here from Gujrat and other places.

25. There appears to be a larger sale, and therefore the use is on the increase.

26. Ganja is smoked very often in the day in the same way as snuff is used.

27. Lower orders of Hindus generally and all classes of Musalmans. Higher orders of Hindus also sometimes use it. It is sometimes used in the beginning as medicine to facilitate digestion, to check diarrhoea, dysentery, etc.

28. One-fourth of a seer (a seer = 21 tolas in weight) is the quantity used a day by excessive consumers. One or two tolas by moderate consumers.

29. Tobacco is mixed in using the drug for smoking very often. Dhatura is very rarely used. It is considered to be very strong.

30. Majum is consumed in solitude. Panakum is taken in company. Females also use the drug, but very rarely. Children under twelve years do not use it. Old people ordinarily take three times a day. People in manhood take more often.

31. (a) Easily formed.

(b) Rarely broken off.

(c) Yes. There is a tendency.

32. Panakum is an expensive liquid preparation. It costs about a rupee for ten people at a time. Very many costly ingredients are used in its preparation. Some of the ingredients are-- (1) milk of cow or buffalo, (2) sugar, (3) cloves, (4) coconut juice, (5) cardamom.

33. (b) No. There is no dispute among the class of people that ordinarily use it. The panakum is generally offered to Eswara deity before consumption by people.

(c) Panakum is also worshipped among some classes of people.

34. Some classes of people may grumble. The discontinuance of its use may be considered a serious privation by habitual consumers. It will affect digestion in them.

35. (a) May be feasible, but will be very difficult.

(b) Would be consumed illicitly.

(c) The regular cultivation of the drug may be prohibited; but that would not completely stop

consumption. Complete stoppage is almost impossible.

(d) May cause discontent.

(f) In this part of the country such discontent will not be strong enough to amount to a political danger. The prohibition will increase consumption of alcoholic stimulants or other drugs. There will be a larger consumption of tobacco.

38. Chur takes effect more speedily than round or flat ganja.

39. Smoking is considered to be more injurious than drinking or eating the same drug.

40. Native doctors use the moggu or the flower top for various purposes. Ganja leaves are used in the treatment of cattle disease.

41. Ganja is used or taken for purposes specified in (a), (b), and (c).

No particular classes. In this part of the country generally the lower orders use the drug, not largely. Even among them the proportion is not large. I refer to moderate habitual use.

42. Moderate use is harmless. Moderate consumers enjoy as good health as other people, and attend to their ordinary avocations.

43. Yes. They are quite inoffensive. They avoid quarrels and disturbances.

44. The effect of smoking ganja continues for about an hour. It is not refreshing. It produces intoxication. Panakum both allays hunger and creates appetite, according to circumstances.

Smoking produces weakness. Consuming majum and panakum is refreshing. Effect of majum and panakum continues for about twelve hours. No injurious after-effects in panakum and majum.

45. (a) No. Not majum and panakum.

(b) No. Not majum and panakum.

(c) No. Not majum and panakum.

(d) Ganja smoking produces dysentery and is injurious. It affects the eyes.

(f) Ganja smoking does produce insanity. Only temporary.

47. Not known to be a hereditary habit. Does not affect children.

48. Excessive use of any of these drugs in any form is injurious.

49. Ganja smoking slightly produces impotence. Bhang does not produce that effect.

51. I do not think that moderate consumers of certain preparations of ganja are more prone to commit crimes or offences than others.

53. No.

54. No; it is said to have the opposite effect.

55. Complete stupefaction is produced by the preparation called "majum."

Criminals do induce their victims to partake of ganja to stupefy themselves.

56. Dhatura is mixed by sanyasis and bairagis. Ordinary people do not use it.

60. The cultivation and the process of preparation should be brought more under control than it is now.

68. Yes.

69. In this district the wishes of the people are consulted by enquiry in the neighbourhood of the place where a shop is intended to be opened. I think local public opinion ought to be considered.

169. *Evidence of V. SIVA YOGI, Brahmin, 1st Grade Pleader and Municipal Chairman, Vellore.*

1. Such opportunities as have been afforded during the course of my frequent journey in my professional capacity as Pleader.

2. Yes; the names as defined here.

3. I am not aware of any district in which it grows spontaneously; but it is cultivated at the foot of the hills called the Malayalam hills in Vellore taluk, as also in the Chittaldroog, Mysore province, and on the Nilgiris.

4. The plant itself is known by a single name, ganja tree; but the Arabic name is aseesh, and preparations from it are known by several names.

5. I am unable to give the special conditions to the growth of the wild hemp besides those given below. It is generally cultivated during the dewy season. Cold climate is necessary and a red soil.

6. The growth is ordinarily scattered, but when dense the plants are transplanted.

7. (a) Yes; in the Malayalam hills of the Vellore taluk to a great extent.

8. Cannot say.

9. The land is tilled, manured, and seeds sown like dhall (grain).

10. A special class known as the Malyalees cultivate it. They live apart from others on the hills.

11. I am not in a position to say so, but it is quite probable that they will gather seeds from the wild hemp. The Malyalees generally secure seeds during harvest time.

12. In the Malayalam tract of Vellore taluk the people generally cultivate the wild hemp for the production of ganja to a large extent. The male plant is not generally extirpated, but a small number of the female is.

13. The cultivation is not restricted. It has been for a very long time cultivated in the Malayalam tract; and I am not in a position to state why it has been cultivated in that tract alone. Probably because it is indigenous.

14. Yes. (a) Ganja and (b) charas are prepared in the Polur taluk of this district to a large extent, and (c) bhang in the Vellore taluk to a small extent for daily consumption.

15. Method of preparation from (a) the cultivated plant: As soon as the plant grows to a certain height, they nip the heads to prevent it growing much higher, when it begins to spread. After the flower tops are sufficiently ripe, the plants are cut and stripped of the leaves, of tops and flowers, which are put in a date-leaf basket and trodden under foot. They then cover these with palmyra leaves, and place large stones over them for a period of about 15 days, so that the agglutinated flower tops assume a flattened shape. This is called flat ganja, which is afterwards sold.

(A) *For smoking*.—The ganja, when purchased for smoking, is first saturated in the hollow of the hand with a little water and rubbed for about six or seven times, by which means the seeds are extracted and the mass becomes resinous. To this is added small pieces of tobacco for smoking. The name of this smoking preparation is ganja dhum.

(B) *For eating*.—The flat ganja on being purchased is fried with ghee, by which the active principle is extracted. The refuse, consisting of leaves and flowers, is removed by straining. The

active principle is then mixed with almonds, grapes, apricots, and other fruits, and sweetened with sugar. This preparation is eaten as "halwa." The ignorant call this preparation majum, but by the educated it is known as maljum.

(C) *For drinking*.—The flat ganja on being purchased is placed on a frying pan on the fire and warmed. It is then taken down and ground into powder. Ragi is bought and soaked in water; it then begins to ferment, after which the active principle in the form of a milky juice is extracted and which is boiled; it is then taken down and allowed to cool. The powdered ganja in small quantities is mixed with this and drunk. This is one method of preparing bhang. A second method of preparing bhang is that they boil the ganja with water. The active principle is secured and the water thrown away. This active principle is ground and made into boluses, which are daily consumed.

A third method adopted in the preparation of bhang is that the wild ganja is boiled with water. The active principle is thus secured and the water is thrown away. The active principle is then ground and strained. Almonds, apricots, poppy seeds, water melon seeds, and melon seeds are procured, and the kernels of these are ground with rose water. The active principle of ganja is then mixed with rose water in a new pot previously fumigated with incense, and the other ingredients are added. To this mixture milk is added and sugarcandy water. Plaintain is broken into pieces and mixed with this. This preparation is known by three names—bhang, sabji, and punnia.

16. Bhang is prepared generally by people in their houses. It cannot be prepared from the hemp plant wherever grown, nor can ganja and charas be prepared.

17. By the Rajputs and the Muhammadans.

18. Bhang does deteriorate by keeping. It does lose its effect in time. It keeps good with ordinary care for about 12 hours. No special measures can prevent deterioration. As for ganja and charas, they can keep for years without deterioration.

19. Ganja and charas are only used for smoking.

20. The Rajputs and the Muhammadans, specially of the Indian classes. Thirty per cent. in almost all localities where these are to be had.

21. The flat kind of ganja is used for smoking in this province.

22. Foreign charas is chiefly used. From China and Nepal.

23. Bhang is never used for smoking.

24. The Rajputs, the Muhammadans, and a few Hindus eat bhang. Twenty per cent. in almost all localities where manufactured.

25. The use of ganja, charas and bhang are on the decrease, owing to the sudden death or injury to consumers as also to their poverty.

26. I cannot state for each of these drugs what proportion of the consumers are habitual moderate consumers, or otherwise, but this much is certain—once they begin, the habit grows.

27. Cannot say.

28. A pie's worth.

29. *Vide* answer to question 15, Chapter III. Dhatura is not used as an admixture.

30. It is practised to a large extent in company rather than in solitude. It is mainly confined to the male sex during middle age. It is not usual for children to consume these drugs.

31. The habit is easily formed and difficult to break off. There is a tendency in these drugs for the moderate habit to develop into the excessive.

32. It is said that the Koran (a religious book) prohibits the consumption of these drugs. Even the Hindu Shastras regard the use of intoxicating drugs as sinful. The consumption of these drugs is not recommended either socially or religiously.

33. The consumption of each of these drugs is generally regarded with disrepute, socially and religiously. It is due to a natural tendency to look with abhorrence on all things evil and ruinous. There is no custom, as far as I am aware, of worshipping the hemp plant.

37. The effects of charas smoking are different from ganja smoking, being much stronger owing to the active narcotic principle.

38. Cannot say.

39. The drinking and eating of bhang is less injurious than the smoking of ganja or charas, because the active principle of the former loses much of its effects in the course of preparation, whereas ganja and charas are smoked in its raw state.

40. It is never prescribed on account of its medicinal qualities by any school of native doctors, as far as I know. They are never used in the treatment of cattle disease.

43. Moderate consumers also are quarrelsome to their neighbours.

53. The excessive indulgence sometimes lead to violent actions.

54. Criminals are said to use these drugs to fortify themselves to commit premeditated offences.

68. Ganja is sold in a shop in the municipal market and a shop in the commissariat bazaar. These two shops are licensed.

69. People are not generally consulted as to the opening of shops; but I think it is better that they should be consulted beforehand.

170. Evidence of C. SRINIVAS RAO, Brahmin, Government Pleader, and Chairman, Municipal Council, Cuddalore.

1. I have the opportunity of discussing with a physician dealing with the drugs.

3. I have no information as to the spontaneous growth in this district.

4. It is not abundant in the district. They are generally known as ganja.

9. The seeds taken out of flat ganja sown in a few back yards a few years ago.

10. A few physicians were growing a few plants formerly. They appear to have discontinued since a few years.

11. See No. 9.

16. I am not aware of bhang preparation in this district.

19. Ganja is said to be used very rarely for smoking.

Flat ganja appears to be used in medicines for cholera and dysentery. I know that ganja being used for preparation of certain electuary for treating cholera cases in equal quantities with ten more drugs. Sugar and lime juice after purifying the flat ganja leaves. Flat ganja is used for making pills, along with pepper and other drugs, for the benefit of labouring classes in certain localities.

21. Chiefly flat ganja by those who rarely use it.

24. In the divisions of Bombay and Bengal Presidencies.

28. A few coolies may buy the pills for one or two pices, rarely once in a week or a fortnight.

29. I am not aware of dhatura being mixed with ganja in the district.

30. I don't think children in the district ever consume the drug.

32. In this part of the district the use of the drug is considered injurious, and appears to have

been generally hated by a majority of the civilised classes.

33. No such custom in the district, as far as I am aware of.

34. I don't think so.

35. No political danger as far as this district goes.

36. I have no reason to think.

40. They are prescribed. A tola weight of flat ganja well purified, added to the following drugs of each one tola weight and prepared as stated below, has been found to be effectual in dysentery and cholera cases. I have tried the medicine in many cases and found it to be successful. The articles are—dry ginger, pepper, long pepper, Gallnut flower, country berry or nelikoy, omem, cloves, cardamoms, catechu. All these powdered and mixed up with $\frac{1}{4}$ tola weight of opium dissolved into water and mixed up with 12 tolas weight of sugar, 12 tolas weight of water, 12 tolas of lime juice. These last three boiled together become a good medicine, a dose of medicine being equal to the size of four peppers, to be repeated once in 30 minutes three or four times until necessity ceases.

54. It is often said criminals use country arrack, but nothing heard of these drugs in connection with criminals.

60. I am not aware of cultivation to any appreciable extent. It is the impression of the public here that such cultivation is objectionable.

62. To assess the cultivation of the plants sufficiently heavy would effectually prevent or control.

63. No objection.

64. No objection.

171. *Evidence of V. SRINIVASA RAO, Brahmin, Pleader, District Munsiff's Court, Tirukoilur, South Arcot.*

1. I had opportunities of seeing certain persons that habitually smoke ganja, and the information herein given is gathered from them.

3. In the district of South Arcot it is grown spontaneously in Jadaia Gounden, Kurambu Gounden, and Javadi Hills.

14. Ganja and bhang.

16. Bhang is prepared in houses by habitual consumers to a small extent.

19. Ganja is used for smoking, and also a sort of beverage is prepared from the juice of leaf, mixing with it sugar.

20. Among Hindus a set of wandering mendicants, called pardesis, and bairagis, smoke ganja. Some Hindus of the higher class secretly use, and certain people of the Sudra class also smoke. The Rajput class also use it. Among Muhammadans, the fakirs smoke ganja. In the southern districts of the Presidency of Madras it is less used than the northern districts and upper India.

25. The use is on the decrease. It is looked down by society.

28. One anna worth.

32. In Hindu traditional books it is said that sages who practised yogam were in the habit of using it. The pardesis, who imitate those sages, have borrowed the custom.

33. The consumption is considered to be in

breach of social laws. The consumers are looked upon with contempt. The public opinion is wholly against its use. This sentiment is due to its intoxicating effects. The object of consumption among well-to-do classes is not on account of medicinal properties but to give undue strength to satisfy certain desires.

39. Smoking is less injurious, as it does not excite the system as much as eating, nor it spoils constitution as eating, even if an overdose is taken.

40. School of native doctors, such as Agastia, Bogar and others, have prescribed on account of its medicinal qualities to be admixed in the preparation of medicine.

41. Moderate use invigorates the body.

42. Moderate use, if habitually practised and assimilated, will not be injurious. Moderate use does not produce any baneful effects. It does not produce exhaustion. It gives energy and capacity to bear fatigue and hard work.

43. Yes.

44. It gives strength to the body and vigour. At the beginning a little stupefaction is produced, which gradually disappears as the use becomes habitual. It also creates appetite after its influence is over, which generally lasts for an hour or two.

172. *Evidence of MANCHALLER JAGANNADHAM, Brahmin, Pleader, Bapatla, Kistna District.*

1. I have come in contact with the ganja contractors and cultivators in the course of my profession as a Pleader. I have also had occasion to associate with the wandering bairagis.

3. In Daggupad, Kistna district, and in Bhadra Chalan forests. In Daggupad it is not spontaneous, but it is cultivated abundantly.

14. (a) Ganja is prepared.

(c) Bhang is also prepared.

(a) and (c) Generally throughout the district.

16. Bhang is not prepared generally in their houses. Ganja may be prepared from the wild plant.

19. Ganja is used only for smoking to my knowledge.

20. Wandering bairagis smoke ganja as a rule. Beyond this, it cannot be laid down as a general rule that any particular class of people smoke ganja.

38. The average allowance to a habitual consumer of ganja is half anna weight; but a certain smoker told me that he could smoke 30 tolas weight of ganja in a day if he had the means to do so.

33. Bairagis regard the use of ganja as enabling them to fix their mind upon the Divine Principle in their process of (Samadhi) concentration of mind upon the Eternal Principle. This plant is therefore known as yoga patri in the common language of bairagis. Ganja smoking

is in disrepute because habitual consumers are known to be drowsy. Ganja smokers are proverbially lazy.

40. (a) Telugu people use ganja plant in the treatment of dysentery along with other ingredients and in certain electuaries intended for improving the general tone of the body.

(b) Ganja leaf (not dried) is given to cows and buffaloes which withhold milk. It then gives milk. It is not used for any cattle diseases in this part of the country to my knowledge.

41. Yes; it may be beneficial too. I know instances in which patients are cured of cough by the smoking of ganja.

43. No.

44. Moderate use does not produce intoxication. It is said to be refreshing, to allay hunger, and at the same time to create appetite. I know people who have not asked for food for hours together after smoking. Yes; it produces uneasiness. I know consumers who could not get ganja for a day having been restless. They had to give up that habit gradually.

49. Bhang is used as an aphrodisiac.

51. Crime has little or no connection with the smoking of ganja or bhang. Most violent crimes have wine or woman at the bottom. Country liquor plays a prominent part in the commission of violent crimes.

53. I know of no case in which it has led to temporary homicidal frenzy.

173. *Evidence of P. KESAVA PILLAI, Karnam, Pleader, and Honorary Secretary of the Gooty People's Association.*

1. Local enquiries made at Gooty.

2. The definitions accepted. Both charas and bhang are not used here. They call plants with seeds male, and with only flowers female. They do not use female plants; and they remove them as soon as they can distinguish male from female. Flat ganja is known here as mandham, and the round ganja as mulki.

7. It is limited to a few backyards and compounds and sometimes in vegetable gardens.

8. The cultivation does not increase.

9. It is watered till it becomes fit for use.

10. Muhammadan fakirs as a rule.

And, if cultivators, if any grow it, they do it for medicinal purposes and for giving it to bairagis.

13. It is cultivated here and there in small patches. It is not restricted to any portions in the district.

14. (a) Ganja, yes.

(b) Charas, no.

(c) Bhang, no.

It is for the use of the manufacturer and his associates.

15. It is for smoking only.

16. Bhang is not known here.

18. It is valued up to a year. Bats have a great relish for it, as parrots covet it while growing in the fields.

19. Ganja is used for smoking during the summer; round ganja is used for drinking also. After making it a paste, mix with water, and strain it; and this is mixed with sugar and some spices, and then taken as a cooling and stupefying draught.

20. Muhammadans, Chetty balijas, fishermen, malas, madigas and linga balijas. In Gooty, Pamidi, Urnakondah and Guntakul, the majority of the ganja users live. In almost every village one or two may be found.

21. Now they get round ganja for smoking. Flat ganja cannot be had. Round ganja is imported in preference to the other for the reason that there is very little demand for the latter.

22. No charas is understood here.

23. Bhang is unknown.

25. The smoking is on the increase. It is by association with ganja smoker who by his apparent liberality and profuse praise of its virtues induce lazy loungers to begin to smoke. It is dead cheap. They can gratify their desire for getting intoxicated with a few puffs of ganja smoke when they cannot afford the luxury of drinking spirituous liquors and toddy. There are some ganja smokers who do not drink.

It does not supersede drinking gradually.

26. Consumers are all habitually moderate. We do not hear of habitual excessive consumers. Unlike opium smokers, ganja smokers can occasionally smoke and give it up.

27. *Vide* remarks against question 20. Lazy habits of people who resort to places where fakirs and such people lounge.

28. Three to six pies for both morning and evening for habitual moderate consumers; and 1 to 2 pies for a beginner.

29. Tobacco is mixed with it to give it a better flavour and neutralize its bad effects. No dhatura here.

30. As a rule, they smoke in company. Only males use it; children do not smoke it.

31. They can break off the habit without difficulty. They say that there would be no harm to their constitutions. Bairagis may feel it difficult to break off the habit.

32. It is not associated with any social or religious custom. Almost all the bairagis use it, and passionately like it for the reason that it is an effective preventive against fevers as well as the effects of cold and of drinking all sorts of water in their wanderings.

33. (a) In these parts the consumers are held in contempt, and a ganja smoker himself would not proclaim his habit, and feels it a disgrace to be known as a ganja smoker; but this remark is not applicable to fakirs and lowest classes of people.

(b) The public sentiment against it is due to the feeling that a ganja smoker is known to be a lazy and never-well-to-do fellow, and has little credit. No doubt a ganja smoker is a better member of society than a drunkard; nevertheless, he is not considered to be a morally sensitive being.

(c) No custom of worshipping the plant exists anywhere here.

34. Except to bairagis and fakirs, and perhaps to fishermen, the rest would not feel it as a great privation.

Bairagis are wanderers and often they have spare clothing. They think it a great preventive against the effects of climate, etc. It also warms them up; therefore some cultivators make it a point to cultivate ganja, and consider it meritorious to make doles of ganja leaves to the bairagis. Fishermen, but only very few, to warm themselves after their labour in water. Fakirs to while away their time.

35. It is feasible here. There will not be any political danger; but the bairagis and fakirs who wander from place to place have to be reckoned with, in case it is prohibited everywhere and not allowed to be imported. Yes, the consumers, at least the majority of them, will take to the worse habit of drinking liquors.

36. I don't think that the drug to any extent is substituted by liquor or *vice versa*. In spite of their cost, toddy and liquor are drunk largely, and the number of their consumers are on the increase.

40. (a) Yes.

(b) It is used for cattle disease.

41. (a) Yes, by the consumers.

(b) Yes.

(c) Yes.

42. It is believed that it makes the ganja smoker stupid and idiotic.

43. Yes.

44. The immediate effect is stupefying the intellect on a beginner. Bairagis say that it allays hunger to some extent, and that it is also refreshing. Want of subsequent gratification will produce longing for it as much as a habitual tobacco smoker feels for tobacco.

45. Bairagis being unmarried as a class, their constitutions are not undermined. Others, unless their nourishment is good, gradually suffer. Lung diseases occur after a long use. It does impair or blunt moral sense and induce laziness, but not immorality of the kind of debauchery. It does deaden the intellect and produce insanity, but such instances are rare. Insanity is observed when it is excessively used, without corresponding nourishment. I heard of one or two insane men in the Gooty sub-jail. Kamsala Ramama, of Putloor, became insane, they say, by smoking ganja excessively.

47. No.

49. No; it is not used by prostitutes. The use of hemp tends to produce impotence.

51. No; unlike toddy and liquor or arrack, moderate use of ganja has no connection with crime.

53. No instances are known.

54. No; it unfits a man by making him dull and stupid.

55. Not in these parts.

57. Ganja is drunk. They say it is refreshing in the summer.

58. The consumers are generally beggars and poor people. I don't think that it will do any good by raising the taxation a little higher. After all it is not so bad as toddy and liquor which is simply ruining the people, and that in increasing numbers.

60. Cultivation is very limited. The cultivators may be made to take a license for the purpose. It will check its increase.

63. The licensed shops ought to be limited to a few centres in a district. Indiscriminate licenses to sell everywhere tend to increase the consumption. It is too tempting to lazy people to resist the fancy to try it, and then acquire the habit. If it is to be obtained with some trouble from a distant place, many a consumer, who has taken to it for the mere pleasure of it, will give it up. Those that grow the plant will be few, and will not daily part with it even for the sake of company.

67. *Vide* my remarks against 58.

68. They are sold in licensed shops. No smoking on the premises. Nothing bad is heard since the sellers are not themselves consumers.

69. No; people of a place are of no account in selecting places or granting licenses. It is necessary that people should be given an option in the matter. If local option is given, it will prevent many an evil arising from opening shops selling intoxicating drugs or liquids.

Oral evidence.

Question 1.—I have lived at Gooty, and practised there as pleader since 1882. I have been

Secretary of the Gooty People's Association since 1884. I have consulted the members of the association in framing my answers, but I present them on my own responsibility, not as representing the association.

Question 32.—None, but the lower classes and of those only who are used to it take the drug in the Holi or Kama festival. The use by the Sat-tanis is not a religious custom.

The use of alcohol and opium is also in disrepute. The liquor drinker injures others as well as himself. The ganja consumer injures himself alone; opium costs more and injures the consumer pecuniarily as well as physically. These are the general views. I consider that alcohol and opium are more in disrepute among the people than the hemp drug, because of the greater injury they do to society. There is another point about opium that it becomes a necessity, whereas the hemp drug can be given up.

Question 35.—Prohibition would, in my opinion, stop the desultory cultivation in backyards. There would be no strong feeling aroused by prohibition of cultivation, for the people generally are against the drug, provided consumers had reasonable facilities for getting the drug.

Question 45.—The moderate use does not, in my opinion, cause insanity. I only know of one case of alleged insanity from the hemp drugs. He was in the Gooty Jail under observation, and was sent to the Madras Asylum. The jail authorities told me about him, and I did not see the man myself.

Question 63.—I have no particular locality in my mind, in which there are too many shops. In my own district, I think the number of shops is reasonable. My written answer on the subject is general.

Question 69.—I think Local Boards and Unions might be given an option with regard to the opening and shutting of shops. To some extent, the Local Boards represent the rural interests. In towns the Municipal Councils might be consulted, both as regards the opening and shutting of shops, as the Local Boards might in rural tracts. The Collector may have the interests of the people at heart, but for his information he is at the mercy of Tahsildars, who are not as well qualified to judge by the needs of the locality as the Local Boards and Municipal Councils. Before restrictions are placed on the hemp drug, I should like to see more restriction placed on the facilities for procuring alcohol. I think there would be members of the Local Boards and Municipal Councils who would give consideration to the interests and convenience of ganja consumers. Questions of opening and closing of shops should, at all events, be referred to the Municipal Councils and Local Boards and Unions before the Collector passes his decision upon them.

174. *Evidence of the TEACHERS' ASSOCIATION, Trichinopoly.*

1. Local enquiry amongst dealers and consumers of bhang.

12. Yes. It is cultivated largely by the hill tribes in the Javaji hills in the North Arcot district which extend from Vellore to Jallarpet.

14. (b) Charas is unknown here.

16. (a) Yes.

(b) Yes, but narcotic effects of the wild plant are not so strong as those of the cultivated; and therefore in this town it is by preference prepared from hemp imported from North Arcot district.

(c) The same remark applies to ganja.

19. Gauja is likewise used to increase the intoxicating power of toddy, and also in the preparation of medicines: such as pooruathi, dhathupushti, lahiam, magin, ganja-ghee, and ganja-chatni.

20. Andis, bairagis, jogis, and fakirs smoke in particular; also vagabonds in places where such characters generally meet.

28. One pie per diem—which provides sufficient for four or five separate smokes.

32. It is said to facilitate concentration in the practice of yoga. It is served with pansupari to

bairagis and pandarams on certain ceremonial days. In some parts when guests are invited, ganja preparations with pansupari and fruits are sent in advance.

33. (a) The consumption is treated with contempt.

(b) Religion and society do not sanction it.

40. It is administered as medicine in flatulence, cholera, dyspepsia, diarrhoea, sleeplessness in conjunction with other drugs.

49. See answer to question 19. (dhathupushti lahiam.)

**175. Evidence of the HON'BLE A. SABAPATHY MOODELLIAR, RAI BAHADUR,*
Merchant, Bellary.**

1. I was an abkari renter for some years and had occasion to know something of the excise administration of the province; during that time I have often come in contact with persons interested in the trade of hemp drugs. Further, as a merchant and agriculturist myself, though not dealing in this particular branch, I have had opportunities of gaining knowledge of the hemp drugs.

2. Bhang and charas are not known in the Madras Presidency. They are not even imported.

Yes, there are three varieties of ganja in this Presidency. The flat ganja is called javaji ganja; the round ganja is called mandam ganja and broken ganja is called mulki ganja.

The definition of ganja given in this section may be accepted for this province.

3. I have heard that hemp plants grow spontaneously in Punjab and the adjacent parts. There it grows abundantly.

4. The plant that grows spontaneously in Punjab is called the bhang plant. It is full of leaves and destitute of flowers.

What is called ganja plant is purposely grown in the Nizam's Dominions, Bombay Presidency, Indore, etc. The mandam ganja (*vide 2 supra*) is manufactured from this. This plant bears a little long flower.

The plant that grows in the Madras Presidency produces the mulki ganja (*vide 2 supra*) and bears small flowers.

5. The wild hemp grows abundantly on the hills and mountains; it requires much of snow as distinguished from cultivated hemp. A cold climate suits it best.

6. It is generally dense, the seeds falling down in a lot from the plants on hills. New plants grow thereon very close to each other, and the hand of man never interferes with the growth of the wild hemp.

7. Yes.

(a) Hemp plant is cultivated in Madras Presidency for the production of ganja. In almost every district it is cultivated; much is grown in the Kistna district; Nandyal taluq in Kurnool district comes next in order. It is also cultivated in Anantapur, Cuddapah, and Bellary districts.

(b), (c), (d) No.

8. I must say there has been increase in the area under cultivation. The reason for such an increase is apparently more profit with less trouble and anxiety on the part of the cultivators, on

whom there appears to be pressing indents from the Government contractors, which only shows the number of people using is steadily on the increase, and there is a good demand for the stuff in the market.

9. The seeds are sown on a plot of ground well tilled; the tender plants sprouting up in a group; this piece of land forms the nursery from which they are taken out and planted one by one in regular order, in the surrounding fields. It is also grown in some of the gardens, and to a limited extent in the backyards of houses. These plants do not require much water, and this saves much trouble in its cultivation.

10. There is no special class of people.

11. No; they are not from the seed of the wild hemp.

12. Wild hemp is not cultivated for the production of ganja.

13. It is not restricted. I do not know of any special conditions of climate, etc. But so far as I have known, the hemp for ganja grows luxuriantly in warm climates, requires only moderate rain, and it is not necessary the level of the ground should be far above that of the sea. I don't think it would be impossible to cultivate it in any part of the Madras Presidency.

14. (a) Ganja is produced (*vide* answer under section 4). I am not in possession of any statistics. I can say vaguely that large quantities are produced. For instance, one village, *viz.*, Duggupad in the Kistna district produces about 20,000 maunds a year.

15. (A) *Ganja for smoking.*—A little of it is taken in the palm, well rubbed to remove the seeds, stalk, etc., the remainder is mixed with a little of powdered tobacco, and put in the pipe to smoke.

(B) *Ganja for eating.*—Clean ganja, free from seeds, etc., is well boiled in ghee, mixed with sugar and made into small flat pieces. This is called majun.

(C) *Ganja for drinking.*—Clean ganja, well powdered, is mixed with spices and several ingredients of varied taste and flavour, then boiled in milk. This is for drinking. This is known here as bhang.

16. Bhang can only be prepared from the bhang plant; ganja or charas cannot be prepared from the wild plant wherever grown.

17. No special classes.

18. They do deteriorate by long keeping. The full effect is lost in time. With ordinary care they keep good for one year. The cause of dete-

*Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

riation is exposure and natural effect of time upon things. No special preventive measures can be taken except preservation without exposure to damp air and sun.

19. See answer under section 15 *supra*.

20. Ganja is generally smoked by workmen, poor people who require intoxication, by fakirs, and the sadhus of Northern India; in this province the ganja smokers are generally low class people.

21. Those who want good intoxication smoke mulki ganja, and those who look to their health smoke mandam ganja.

25. The use of ganja is on the increase; generally poor people, the lazy of them, find amusement in it. They assemble generally on the street verandahs: the habit is communicated gradually to those near them. The working classes take to it as a cheap luxury. The use of ganja by one tempts the neighbour and the inducement is rather great.

26. (a) $\frac{1}{4}$.

(b) $\frac{1}{4}$.

(c) Nil.

(d) Nil.

27. Moderate consumers are generally well-to-do people and are of some respectability; secondly, they are workmen, doing coolie work; thirdly, they are vagabonds and stray fellows with no other work except killing time in idle talk; these last are generally mean folks.

(1) Class in the above use ganja as a luxury with a view to be able to eat and drink well and sumptuously.

(2) Class use it as a recreation and to enjoy sound sleep during nights.

(3) Class use it as a fashion of the day among idlers, of the excessive consumers, the fakirs, etc., use ganja to enable them to concentrate steadily their mind on God and to secure one-pointedness of the mind.

28. To smoke ganja it costs a man one pie or two for a dose. Moderate consumers may be said to have 2 or 3 doses a day.

29. Bhang massala consists of several ingredients, such as poppy seeds, spices, milk, etc.

30. When a man smokes ganja, he usually hands the chillum to the one next to him. They smoke or drink in company. Smoking in solitude is rare. Females and children also smoke ganja, but not to a large extent in this presidency.

31. (a) The habit is easily formed.

(b) The man habituated to the use of ganja will feel very uneasy for about ten days or so if he breaks off. Afterwards he may turn all right.

(c) The moderate consumer will not like to smoke excessively unless he changes his mode of life to that of an idle, sedentary habit, in which case there is more probability.

32. The use of ganja by the Brahmins of this presidency is prohibited by religion. The other respectable castes follow suit in holding the same view.

33. Ganja smokers in this province are looked upon as people whose words cannot be relied upon; the use of any form of the narcotic is generally in disrepute, because intoxication blinds the reason of man, his brain is muddled; and under its influence the man evolves endless fancy, mental pictures, and indulges in them to the detriment of his duty in the world as man.

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34. To them, of course, it is a privation, rather of a serious nature too. It is very likely that such enforced abstinence may affect the health of some of the habitual consumers, who are mentally very weak; but this can be remedied in the natural way by lapse of time. Anyhow the consumer is sure to feel a shock and labour under it for about ten days at least.

35. Unless the cultivation of the hemp plant, which is now promiscuously done, be stopped, it is not feasible to prohibit the use of any of these drugs. The prohibition will eventually produce serious discontent, but this feeling will die away in course of time. There can be no political danger from such a step.

Ganja consumers will not take to other intoxicants, as the latter are more costly than ganja. The fact that as much intoxication as from four annas worth of liquor could be got from one pie worth of ganja, stories foremost to all, and this is how even poor people also afford to use ganja freely. Perhaps after ganja toddy may be liked by these people, as it is only cheap intoxicating beverage available next to ganja.

36. No; I do not think alcohol is substituted for any of these drugs.

37. I do not know.

38. Mandam ganja does not impair health. Mulki ganja is more intoxicating than either of the other two. Javaji ganja is ordinary in its effects.

39. Smoking ganja is more injurious than eating or drinking. The sharpness of its nature is softened when mixed with ghee or milk, whereas in smoking the ganja is used in a raw state and thus produces more heat in the body.

40. Ganja is used in medicine; but no medical man prescribes the use of ganja regularly in a habitual manner. Ganja is also used in the treatment of cattle disease.

41. (a) Ganja consumers taste food well, eat much and can digest all that.

(b) To some extent it is beneficial in alleviating fatigue.

(c) Decidedly it is a preventive of disease in malarious and unhealthy tracts.

There can be no occasional use of ganja, whether moderate or otherwise. If at all a man uses it, he would be a habitual consumer; as a new man cannot withstand its intoxicating effects.

42. I do not think it is quite harmless. It renders a man unfit to some extent for worldly purposes of active life. The habituated man generally runs mad after it if he could not get it in time.

43. They are inoffensive.

44. It is refreshing in a slight manner, produces intoxication; it does not allay hunger, but the man is insensible of the appetite, being biliously giddy. Yet the man can take in a large quantity of food if offered. The effect may last for nearly six hours.

45 and 46. It impairs the constitution if proper nourishment is wanting.

It does not injure digestion directly.

It causes dysentery, costiveness: invariably brings on asthma.

It induces laziness generally; but steadiness in the work in hand or taken up at the time

47. It is so for the most part in Northern India.

48. Not necessarily hereditary.
49. The habitual use of ganja tends to impotence in the long run.
50. The stage of impotence is reached earlier.
51. A large proportion of bad characters are habitual moderate consumers of ganja. The use of ganja does not result in the commission of crime.
52. A large proportion of bad characters are habitual moderate consumers of ganja. The use of ganja does not result in the commission of crime.
53. No; I know of no such cases.
54. Ganja mixed with some other drugs or intoxicants is, I think, so used and not mere ganja.
55. Any new man taking ganja, if induced to sleep, can enjoy it soundly, when any crime can possibly be committed, such as robbery. Raw ganja, with or without admixture, stupefies man if taken in, but not by mere smoking. The stupefaction by ganja is not complete.
56. I do not know.
57. See answer under 55.
58. It is capable of improvement.
- 59 and 60. The cultivation of hemp must be restricted; any man wishing to cultivate must obtain the permission of Government to do so, mentioning the area of land so cultivated, so that there may be a public record of such lands and

their extent, and all possible information connected with it for ready reference; this will put a stop to the promiscuous growing of hemp in gardens and backyards also. The ganja harvest must also be conducted under Government supervision to ascertain the quantity produced in the country.

62. The cultivation of hemp plant for the production of bhang should be controlled. This would be feasible. By raising the tax and keeping severe supervision of the Government in the cultivation of the hemp plant.

63. My objection to the system of retail vend is that all poor people who are lazy vagabonds and who are in the habit of smoking ganja, etc., can get the thing to satisfy their pernicious habit for a pie or for two pies, so, that they may use it for one day, but if it is to be a wholesale vend, then there will be an indirect check on the free use of these.

65. The taxation is reasonable.

68. There are shops licensed for the sale of ganja. I have nothing special to say on these.

69. It is a matter of formality that is gone through of consulting the neighbours before the shop is opened. Public opinion ought to be considered before opening such shops.

70. I have heard that ganja is imported from Native States by travellers occasionally and also by merchants. I think duty is really paid by the merchants.

176. *Evidence of CHODISETTY VENKATARAMNUM, Merchant, Coconada, Godavari District.*

1. I had this information by consulting several experienced native physicians and well-known consumers of these hemp drugs.

2. Out of these three narcotic articles which are obtained from hemp, only two are in use in these parts of the country, *viz.*, ganja and bhang. The female hemp plant is far superior to the male one. This plant is generally cultivated in the plains.

Charas is not generally known to the people of Southern India, and it is in common use in Northern India.

Ganja, consisting of the dried flowering tops of cultivated female hemp plants which have become coated with resin is generally known by the name of kally. Flat ganja is in common use in these parts of the country. Round ganja and broken ganja are not known to this part.

Only two varieties of the hemp drugs, *viz.*, ganja and bhang, may be accepted to our province.

3. Spontaneous growth of these hemp plants is generally to be seen in the hilly tracts of Northern Circars. It is abundant, especially in the district of Ganjam.

4. It is generally known by the name of ganja. It exactly refers to the same plant.

5. It is necessary to the growth of the wild hemp that the climate should be cold. The fall of the rain and snow must be very frequent. The soil must be fertile. Elevation is not so very essential for its growth.

6. The growth of the wild hemp is ordinarily scattered. If the growth is dense, it is scarce that the plant bears the flowering-tops coated with resin, which is the essential part of this plant.

7. The districts of Kristna and Ganjam have

cultivation of this plant to a certain extent. The seeds are not used in preparing bhang. These seeds are used for medicine.

8. As far as the knowledge of my information goes, I see neither increase nor decrease in the area under such cultivation.

9. The soil is manured before the seeds are sown. These little plants, after they have grown to the height of six inches, are taken away and transplanted in a different manured soil, at a distance of three or four feet from each other, either singly or doubly.

10. They do not form a special class. They are of the same classes as other agricultural cultivators.

11. No such restriction is necessary.

12. The hilly tracts of Northern Circars have this practice in general. In all cases where the cultivation of this plant is made, the male plant is extirpated with no exceptions.

13. The cultivation of this hemp plant is restricted to the districts of Kristna, Ganjam, and Vizag. It is restricted to these districts, because there are people acquainted with this cultivation in those parts. The cultivation of this plant would be impossible to the parts where the soil is fruitless.

14. Ganja and bhang are prepared in our province or in our part to some extent. Charas is not at all known to our part.

15. There is no difference between the preparation of the cultivated and wild plant. Ganja is used for smoking. The process of preparation for smoking is this:—The flat ganja, that is, the agglutinated dried leaves of the hemp plant, is

washed away with water five or six times, and the seeds, if any, will be removed and then dried for a little while. It will then be put in a pipe and burnt with a little fire over it, and the smoke produced by the combustion will be taken into.

16. Bhang can be prepared by the people in their houses, who are accustomed to drink it. The process of preparing bhang is this:—Bhang is prepared either with milk or with water. Bhang with water is generally used. Four tolas of ganja is heated with fire and pounded well, and then mixed in one seer of water, and then half a tola cardamoms and one tola pepper is also pounded and mixed in the same water and then drunk. The same process is adopted in the case of bhang prepared with milk.

17. It is not restricted to any particular class of people.

18. Ganja and bhang deteriorate by keeping after they are prepared according to the process above defined, and they quite lose their effect if they are kept more than three hours. They cannot be kept good with any amount of care after that time. No special measures can be taken to prevent deterioration.

Charas does not deteriorate, as it is of the similar stamp with opium.

In a medical point of view, hemp drugs are to a certain extent useful to the people at large. It will not injure a man if it is moderately used. Excessive use of it will reduce a man in health. It affects the person using it, but not others, as other liquors as toddy, etc. A man will never be bereft of his senses by using ganja or bhang.

19. Ganja is used for smoking and for medicines. Charas is not known to us. Ganja is prevalent in the districts, Ganjam, Vizag, Kristna and Godavari to some extent.

20. Ganja is used by all classes of people indiscriminately in Northern Circars. The proportion of the people using it is a little less than $\frac{1}{16}$ part of the people.

21. Flat ganja is preferred for smoking in this part of the country.

22. We do not know anything about this.

23. Bhang is prepared either with water or milk, and so it can never be used for smoking. We cannot restrict it to any place or to any class of people. It is used to a very small extent.

24. There is no restriction of class or caste. The proportion is a little less than $\frac{1}{16}$ part.

25. Some people get themselves accustomed to it out of mere wantonness, and some others out of necessity.

26. Cannot give so very exactly the proportion of these different consumers.

27. Some people take it for medicine, others use it for pleasure. Hindu ascetics generally use it because it keeps the mind of a man steady. Furthermore, they use it with the object of keeping good health, as they lead a wandering life. The main object of these Hindu ascetics in smoking ganja or in drinking bhang excessively is to subside their passions.

28. Habitual moderate consumers use one tola of ganja per diem, which costs one-half anna. Habitual excessive consumers use two tolas of ganja per diem, which costs one anna. I cannot give the limit of ganja consumed by the Hindu ascetics, because it supplies the place of food in their case.

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29. Some people use tobacco also in smoking ganja, but Hindu ascetics use it without any other ingredient. Some people mix dhatura in bhang, being desirous of having greater intoxication. Bhang massala is nothing but bhang prepared with milk or water, in which they mix costly spices. This bhang massala is generally drunk by rich people.

30. These three drugs are used mostly in company. In respectable classes, females never use these drugs; but females of lower orders, such as jugglers, etc., use it. This practice is prevalent in Northern India. Children never use these drugs. Old people generally use it because it nerves the body of a man.

31. (a) This habit of consuming any of these drugs is not easily formed, because it will not agree with some constitutions. Constant and persisting use of it puts a man in the habit of consuming these drugs.

(b) It is very difficult to break off.

(c) These drugs have not got that tendency of developing the moderate habit into the excessive.

32. The social custom of offering ganja or bhang in receiving friends or relatives is prevalent in Northern India where these drugs are largely used. This custom is essential, just as people of Southern India offer betel leaves and nuts. It is generally temperate. It is not at all injurious, but leads to the formation of the habit.

33. The consumption of these drugs is not generally regarded in Southern India, where people are accustomed to consume tobacco. The majority of the people use tobacco, but in Northern India, where people are much given to this practice, regard it in high estimation. I do not know of people of any sect who worship the hemp plant.

34. It is not at all a serious privation to any class of consumers to forego the consumption of the drug they use.

35. Of course it would be feasible for the Government to prohibit the use of any or all of these drugs by passing an enactment. The prohibition of using these drugs occasions a sort of discontent among the consumers, who are very little in number in this part of the country. It would not amount to a political danger, as the number of consumers is very little.

36. Certainly alcohol is now being substituted for these drugs; it is feasible to prohibit. I now strongly speak that alcohol is much more injurious than these drugs. Alcohol entirely makes a man bereft of his senses when taken excessively. On the other hand, these hemp drugs are not injurious to others, but to its consumers.

37. I cannot state the difference between the effects of charas smoking and ganja smoking, as charas is not at all known to this part of country.

38. Round ganja produces much heat upon the constitution of a man, whereas flat ganja produces less heat.

Chur is not known to this part, and so we cannot give its effects.

39. All these three preparations are equally injurious.

40. (a) It is prescribed on account of its medicinal qualities by some school of native doctors.

(b) I do not think it is used in the treatment of cattle disease.

41. The moderate use of these three preparations is beneficial in its effects, as a food digestive,

in alleviating fatigue and as a preventive of disease in malarious and unhealthy tracts.

I refer to moderate occasional use of it.

42. These drugs, when taken moderately, prove beneficial and do no harm.

43. Of course they are inoffensive.

44. Moderate use of these drugs would give relief to those who walk long distances, and who are tired on account of excessive work. It no doubt creates a free, jovial and unshaken state of mind for meditation. It is refreshing. It does not produce intoxication. When it is mixed with sugar, etc., it allays hunger temporarily. When the drug alone is taken, it creates appetite. Its effect lasts for about three hours. There will be no after-effects. It does not produce any longing or uneasiness.

45. (a) No, nothing of that sort.

(b) No.

(c) No.

(d) There will be a sort of remedy for the diseases questioned.

(e) No. It further creates activity in the man.

(f) Never.

(g) It will not give relief to persons suffering from mental anxiety or insanity.

46. When it becomes perfectly agreeable to the constitution, it does no harm, whatever quantity is taken. It is quite plain to say that no one comes forward to use the drug when it does not agree with his constitution. It does not create as much temptation as alcohol for beginners. This is as harmless as tobacco.

47. No.

48. It requires no discussion.

49. Moderate use of these drugs practised as an aphrodisiac, when strong and substantial food is taken. The excessive use of this hemp produces impotence if substantial food is wanting.

50. No doubt it creates gradually impotence, when it is excessively taken without sufficient food.

51. None, on account of this drug.

52. The same question is well discussed in answering some of the previous questions.

53. No.

54. No. This drug does not bereave a man of his senses.

55. When this drug is alone taken, and when it is prepared properly, it will not do any one any sort of harm when it is taken moderately.

56. No harm when taken moderately. It does some harm when taken excessively, and when it is not agreeable to the constitution. When it is mixed with dhatura, it produces bad results.

57. Yes, these are largely taken in cold climates.

58. The present system of excise administration is working well and requires no improvement.

60. This plant can well be cultivated wherever strong soil is found.

61. Charas is not cultivated in these parts.

62. No modification is necessary.

63. The sale can be managed in any way.

65. I suggest that imposition of heavy taxes is necessary, especially on alcohol, to put down this malpractice, which has turned thousands of people as drunkards.

66. We know nothing about it.

67. I have no objections.

68. No.

177. Evidence of KOMMIREDDI NARASINGA ROW NAYUDU GARU, Merchant, Coconada.

1. Having had opportunities of seeing some people who smoke ganja and with some knowledge of native medicine, I answer the following questions:—

3. The hemp plant is grown in the private compounds and fields to a small extent in the districts of Kristna, Vizag and Ganjam, but it is not abundant anywhere.

14. Ganja is prepared in this country to a very small extent, which is of a very inferior quality.

16. Bhang is not generally used in this country. It can be prepared wherever the hemp plant grows. It must be picked when matured, dried and used afterwards. No wild plant is procurable in this country.

19. Ganja is used mostly for smoking, and in medicines and halvas to a small extent. It is equally prevalent in towns and villages to a very small extent.

20. Some low class people and beggars smoke ganja commonly.

24. No people of this country drink bhang or use charas.

25. The use of ganja for smoking is in the same way as many years ago, and the use for halva

or medicine is on the decrease; but the use of intoxicating liquors is on the increase.

28. The cost of ganja is from three pies to one anna a day to a habitual moderate smoker.

32. No social or religious custom of distributing ganja or bhang is in this country.

33. The smoking of this drug is regarded as disreputable. No public opinion (social or religious) is in its favour. No custom of worshipping this plant in this country.

39. Smoking is not considered in any way injurious to health. No drinking or eating the drug in its own form is prevalent in this country.

40. Native doctors of any school do not prescribe the drug as medicine in its original form; but the juice of the leaf and the decoction of the ganja is used for preparing some medicine. It is used for cattle diseases in a few cases.

41. The use of ganja is beneficial to a little degree in its effects.

42. The moderate use of this drug is harmless. I did not see any man behaving in a disorderly

manner under the influence of this drug like that of liquor.

43. They are inoffensive to their neighbours.

44. Not refreshing. Produces a little intoxication, and creates appetite when it is mixed in the halva, which is prepared with at least 20 or 30

other drugs. The ganja mixed in it is a twentieth part the highest.

45. No.

49. No.

51. No connection of its use in any crime. It generally produces timidity.

53, 54 and 55. No.

178. Evidence of MIRZA MEHDY ISPAHANI, Merchant, Madras.

1. My residence in Bombay and Egypt, and travels to Sind and Turkey has given me opportunities of coming in contact with people who habitually or casually used this drug in its several forms.

2. The definitions are correct. All these preparations are of course from the female tree.

3. In the North Arcot district, Vellore taluk. A large quantity is imported from there to Madras. It is abundant in the Salem district on the Jawadi hills.

5. It grows on hills of about 300 feet above the sea level and is generally cultivated in dry lands.

6. The growth is generally scattered.

10. No, they are of the same class of ordinary people as other cultivators.

12. The wild hemp is sometimes cultivated for producing ganja in Cuddapah and Salem districts. The male plant is generally extirpated.

13. The cultivation is not restricted and is common to all the districts, but it would not thrive well in the low lands along the Carnatic Coast.

14. All of these three classes are prepared, but I am unable to give an idea of their extent, which I fancy must be large.

15. I do not think there is much difference between the cultivated and wild plant in preparation.

The dried leaf, called ganja, is saturated in water, the seeds, if any, taken out and then the water is squeezed out of it, and after mixing it with tobacco, either in equal parts or one-third ganja and two-thirds tobacco, it is smoked. The usual quantity is from one-eighth to one-half tola of ganja each time. In India it is generally smoked in small bowls. The vaidians prescribe its smoking as an antidote to malarious persons.

16. Bhang can be prepared by any one at any place as long as the leaves of either the wild or cultivated plant is procurable.

Bhang is prepared in several forms. Pills, syrup, and confection pills are prepared with the dried green leaves, together with anisum or craiva fruit, with the addition of a small quantity of salt. Syrup is made juicy with poppy seeds, almonds, saffron, and refined sugar in sufficient quantities. To make the syrup the leaves are ground in a mortar in the shape of a pulp and then mixed confection: salep anacardiac pestacia, almonds, poppy seeds, hazel nuts, nutmegs, and sugar. The Tamil name is pooruadi lagum, Arabic name majum, Uarak-el-Khiyal. Ganja and charas can also be prepared anywhere and by anybody. There is some trouble in preparing charas.

17. It can be prepared by any one and mostly by Hindus. It is a custom in all important Hindu temples to allow a certain quantity of ganja and tobacco to travellers, mendicants, and gosains. The Hindus of Gujarat give it as charity, as the ganja plant is sacred amongst them.

18. Ganja keeps well for two years and more. It gets stronger with age. Charas and bhang cannot be kept longer than a year.

19. Ganja and charas are only used for smoking.

24. I cannot give any proportion, but what I know is that the use is amongst every class of people more or less.

25. I do not know.

27. It is mostly used by hard-working people and fakirs to relieve them from the fatigue.

28. It is worth Rs. 2½ per weesa of 120 tolas, and I think a quarter of a tola is sufficient for each bowl, which will cost one and a half chittak 2 pies each time, one can smoke as often as he likes, same as tobacco.

31. The habit is very easily formed, and when once accustomed, it is very difficult to break off, and develops into an excess.

32. The plant is considered sacred and worshipped by Gobaies, but I do not know whether the use of it is religiously necessary. Gosains and bairagis in general use it, and sometimes it is given in some places to them as charities.

34. I do think that it will be a privation to those who are accustomed to its use, specially hard-working people, as it relieves them of their mental and bodily fatigues.

35. I do not think it is proper or feasible to prohibit the use, as the consumers may fall upon another drug or alcoholic stimulant, which may be more expensive or dangerous; and as it is mostly used by native soldiers, the prohibition may lead to a great discontent.

38. I do not think there is any difference, as they are one and the same thing; the difference in shape, I think, is occasioned from different modes of packing.

39. I think the smoking is less injurious as it only gives a slight effect to the brain, whilst by eating, the body as well as the brain is affected.

40. They say that its use protects them from bad weather, and also used in treatment of cattle disease.

41. It is beneficial. It does alleviate fatigue. It does prevent disease in malarious and unhealthy tracts.

42. Yes; I do consider that the moderate use of these drugs are harmless.

43. I have not heard of any offence being done to any one by a moderate consumer.

55. I hear of an oil, called bhang oil, used by criminals to stupefy their victims in order to further their designs, but I do not think that the drug itself can be given in such a quantity to produce that effect.

62. I do not think that the cultivation can be controlled, as it can be grown everywhere. I hear that people grow it in their private gardens in flower pots and use the leaves.

179. Evidence of NALUM BHIMARAUZ VYSYA, Merchant, Berhampore, Ganjam District.

1. My answers are purely based on information obtained from habitual consumers and physicians.

3. Bavudu, Somlapur, and Ghumsoor taluks. In Tikkapally it is abundant.

14. Ganja and bhang are prepared in this country, and charas in Cuttack and Bengal presidency. Ganja is a flower-like substance of the plant; bhang is made of the leaves and ganja itself, with an admixture of milk or water together with sugar for drinking purposes. Charas is the gum extracted from the plant, i.e., the essence. Bhang is used to a great extent in the subdivision towns, such as Kassibugga, Parlakimedi, and Kotta Agraharam, etc. Ganja is used for smoking, generally by all religious beggars or gosains in monasteries, and by people in places adjacent to hills, and to a small extent by lower class people in other towns.

16. Bhang is prepared by the people in their houses and temples, from the leaves of the plant wherever grown. Ganja and charas can only be prepared from the plants in the fields where they are grown, but not in other places.

19. Charas is used only for smoking; whereas ganja, besides for smoking, is also used as an ingredient in medicines to stop diarrhoea and to create appetite, etc. An electuary with its admixture is eaten by licentious people with a bad motive. The preparation of bhang from ganja is drunk to produce intoxication. The juice of ganja, prepared as an ointment, is externally applied for cholera patients.

20. Ganja is practised by Telugu Brahmins and banians in proportion of $\frac{1}{4}$ of the whole population, and almost all the lower class people and gosains are in the habit of smoking it in places surrounding the Malias, such as Suradu, Bodagada, Ghumsoor, and the hills also. Generally poor people have recourse to it.

24. More than one-third of the higher classes and the weaver classes and poor people in general drink bhang in towns situated in plains.

25. As other intoxicating drugs, such as opium, liquor, are not easily obtainable by the people at large at a cheap cost, the use of ganja and bhang are on the increase.

28. Those who smoke ganja consume between half a tola and a tola of ganja, at a cost of not less than 6 pies, and not more than one anna a day.

32. In Ganjam district it is allowed by religion that all should consume bhang on Mesha Sankranti day in honour of Siva and Anjaneya. Some repeat and respect the custom on Sivaratri and Dasara.

The worshippers of Durga eat and drink bhang in the months of Asweejum and Chitram in honour of the goddess.

33. The consumption is regarded as bad; but it is not prohibited on the Mesha Sankranti. The

social public opinion in regard to the practice is that it is injurious to health, since it weakens the system, creates delirium, intoxication, and makes the man more talkative. The bhang consumers offer it to the deity before they drink. The followers of Durga worship the plant just as Vyshnavas do the Tulasi plant.

39. Smoking produces greater injury than drinking. Smoking heatens the system, whereas it is cooled by drinking and eating. Smoking affects the lungs and produces lung diseases, generally catarrh.

40. Its medicinal qualities are described in the answer to question 19. Ganja is also prescribed as an ingredient to the medicine called aphrodisiac.

41. However small the use may be, ganja produces evil effects by its smoking; but by using it in the shape of bhang or as a medicine, the effects are beneficial, provided the use be moderate, as it creates appetite and increases digestion.

42. If immediate supply of food is not provided, even the moderate use is injurious, since it acts against the internal organs, leading to mania ultimately; but when food is supplied, the bile created by the use of the drug digests it and gives nourishment to the body.

43. Moderate consumers are generally considered to be inoffensive to others.

44. The immediate effect of smoking alone is intoxication; but its uses in other forms are refreshing and produce intoxication afterwards. Drinking bhang allays hunger, and subsequently creates appetite; but the effects of smoking are contrary.

The effects of smoking last only 15 minutes and those of drinking bhang last more than 6 hours. Prostration is the after-effect. The consumer, if he is not supplied punctually, feels uneasy and longs for it.

49. Yes; it is used (*vide* answer to question 40).

51. Almost all the habitual consumers are treated as men of bad character. It makes a man talk inconsistently.

53. Even the excessive indulgence cannot incite a man to commit an act (punishable under Indian Penal Code) not previously thought of.

54. Though the criminals retain the memory of the violence they intend to commit after the use of these drugs, still their minds cannot be fortified to further their designs, just as they do by drinking liquor.

55. Criminals may have recourse to the drug as a means to stupefy their victims in order to carry out their intentions.

The drug itself without an admixture cannot create complete stupefaction.

180. Evidence of APPALA NARASSIAH CHETTY, Vaisya, Merchant, Berhampore.

4. Tel. Gogu, Uriya "Kaunra." Tel. Janmu, Uriya Tsoni.

7. No. It is not used in this district for the manufacture of intoxicating drugs. For the fibre it is cultivated in this district and Godavari, and

the seeds are put down again to produce new plants.

8. Not that I am aware of.

20. Bairagis and other low classes, about 1 per cent.

22. Charas is not known here. It belongs to the north country.

23. It is not used for smoking.

24. It is not eaten, as it is always used in the form of liquor.

25. It has decreased probably, because the price of spirituous liquors has decreased, and the people are therefore able to drink liquor instead of using their drugs.

30. Women are said to eat it at Puri in Orissa, but they do not do so in this district; children do not eat it.

31. The remarks that apply to liquor apply also to these drugs. It must depend on the individual constitution.

33. It is considered derogatory. It is rather an insult to insinuate that a man eats ganja. The butter decoction is offered to the god Hanuman.

36. Yes. Liquor is cheap.

40. No.

41. Ganja is used in pills as a febrifuge in malarious and unhealthy tracts.

43. No.

58. As far as I am acquainted with the administration of these drugs, the abkari law applying to liquor applies to them also. I do not know of any method deserving to take the place of the present law. Control is exercised under sections 6, 7 and 8 of Act I of 1886, over the import, export and transport of the drug and such preparations as are made from *Cannabis sativa* (see definition).

Section 12 restricts the cultivation to licensees, and sections 55, 56 and 57 provide the penalties for violation of these rules. In order to restrict the use of these drugs, a minimum price such as is imposed on liquor might be imposed on them.

181. Evidence of MR. D. MANECKJI, Parsi, Merchant and Contractor, Calicut.

14. It is grown in Wynaad to a small extent.

15. The blossom of the plant is called ganja, and the leaves are bhang.

In smoking, only the blossoms are used.

Eating—Ganja is roasted, then mixed with ghee and sugar and used. Also it is extracted, and then it is mixed with different sorts of spices, sugar and ghee, and made into a sort of lagam only. Also used in sweetmeats.

Leaves are squeezed, and the liquid is mixed with different sorts of spices and used as a drink.

16. Yes, it cannot be prepared where it is grown, for the leaves must be dried.

17. In Wynaad the growers are the punniers and some canadies, and they prepare the drugs.

18. If carefully kept, they do not deteriorate for nearly three years, when it loses its effect. It must be kept covered, well tied up in bundles out of damp places.

19. I cannot say anything about the drug in the form of charas. Ganja is used in smoking. The other uses of it are described in answer to question No. 15.

20. Very few, and that also of the poor class of Malabar Hindus, smoke it, and all the bairagis who resort to this coast are using it.

21. Flat and round kind are not manufactured here.

22. Do not know.

23. Some very poor people who cannot afford to use alcoholic stimulants resort to bhang.

24. Bhang is not drunk by the people of Malabar as a rule, but foreign Hindus who reside here temporarily are in the habit of drinking bhang.

25. The use of these drugs is so limited in this province that it is difficult to say if it is increasing or decreasing.

26. It is impossible to state.

27. Answer to question No. 20 will do for this.

28. (a) From a quarter to one anna.

(b) From two to four annas worth.

29. Some people mix tobacco in smoking the drug. The object is to increase the intoxication. I do not know of bhang massala.

30. The bairagis as a rule use it when they are young, say about 14 to 15 years of age.

Males as well as females use the drug mostly in smoking.

31. Yes, habit of consuming these drugs forms easily; it is difficult to break off, and the tendency to develop into excess is great.

32. Unable to answer.

33. The custom is generally regarded as bad and is disreputed. I do not know of there being any custom of worshipping the plant by any sect.

34. In Malabar the number of people using these drugs is very little; yet it will be a privation to those who are in the habit.

35. In Malabar there may not be any difficulty in prohibiting the use, and though there may not be any political danger, it may create dissatisfaction to a certain extent, and the prohibition may lead to the use of other drugs and alcoholic stimulants.

36. There is no reason to think so.

37 and 38. Do not know.

39. It is generally believed that smoking of the drugs are more injurious than using it in drinking and eating. The smoking affects the brain, liver and the chest. As for eating and drinking, it is not so much injurious, it being diluted by mixture of other drugs or spices.

40. Do not know.

41. It is said the drug has certain power of digestion, etc., and it is called beneficial in cold climates only.

42. It may be harmless if taken moderately, as it is in case of opium and alcoholic stimulants, with some people.

43. It is offensive.

44. Intoxication is the immediate effect; refreshing to those who are in its habit. It allays hunger; ganja does not; but bhang creates hunger. For some three or four hours the effect lasts. It does produce uneasiness for want of subsequent gratification.

45. (a) It does produce noxious effects, physical, mental and moral also.

(b) to (f) Yes.

(g) I know and have seen parties quite insane who used to smoke ganja.

47 and 48. No.

49. Do not know.

51. I have not experienced any crimes in connection with the use of these drugs as it is seen in people with alcoholic stimulants.

52. Nothing.

53, 54 and 55. I do not know.

56. To stupefy an habitual user of hemp drugs dhatura is given admixed with this drug.

57. I have not experienced any.

Oral evidence.

Question 1.—I am an employer of labour in saw mill, tile factory, and general business. There are some 35 men in each of the two former departments, and some 100 women are employed in making coir yarn. I have been carrying on these businesses for some years, the tile factory and saw mill for six and three years, and other industries for longer time. I have been 40 years resident in Malabar. My answers are based on general observation of the country during my residence. I had coffee estates in Wynaad where workmen were employed sometimes in hundreds. My knowledge of the coast people is more intimate than that of the Wynaad for I only made visits to the latter country. We have also held the liquor contracts of the district. I have also employed workmen in building on contract for Government.

Question 43.—Moderate consumers of the drugs are inoffensive in their conduct. The preparation of the drugs, however, causes disagreeable smells which are offensive.

Question 45.—The bad effects I have described result from the excessive use of ganja. My statement is based on personal observation and experience. The insanes whom I have mentioned became mad from excessive use of ganja. They are travelling bairagis who stay a few days at

Calicut on their way to certain shrines. None of my workmen have become insane. I know one Brahmin resident of Cannanore, who has become insane from the same cause. These insanes are not violent, but utterly stupid and unable to answer questions. The Cannanore Brahmin I saw frequently. The fact that these persons had become insane from the use of ganja was learnt from other people. I know that the Cannanore man used to take the drug. I have seen the bairagis going round begging and putting up at the chattrams, and they always have the drug in their possession. Noticing that some of them are insane, I have enquired the cause and been told that it is the smoking of ganja. I have not known one of these men as a sane man, nor has any of them become insane within my experience. I knew the Cannanore Brahmin when he was sane, and saw him getting worse by degrees till he finally became insane. I did not know his family. I think they are resident in Cannanore. He is a priest, and receives alms from his "yejman." He lived in a house opposite that in which I used to stay when I visited Cannanore, and I frequently talked with him, and jested with him both before and after his intellect began to give way. He was a respectable man. He never talked with me about his private affairs. It is fifteen or twenty years since he was sane. He was then 28 or 30 years of age.

Question 59.—I do not think bhang is injurious, and I would let the people have it. By bhang, I mean the drink, that is made up from pounded leaves. This bhang is not procurable in this country, and must be imported from Wynaad, Coimbatore, or elsewhere. Bhang is the leaf of the plant and is distinct from ganja, which is the blossom. The two things are purchasable in the shop separately. Ganja like alcohol taken moderately is also harmless, but excess is very bad. I don't think any further restrictive measures are necessary with regard to ganja. In Malabar there are not many ganja consumers, and moderate consumers are the majority. The excessive consumers are very few.

182. *Evidence of M. R. RY. V. ANANTH RAO PANTULU GARU, RAO SAHEB, Bank Cashier, Vizagapatam District.*

Oral evidence.

Question 1.—I am cashier in the bank of Madras in Bimlipatam and Chairman of the Municipal Committee. I know the plains in this district, but not the hill tracts. I am a native of this district, born in Vizagapatam.

Question 45.—My knowledge of hemp is limited and of a general character, but I have been inquiring since this Commission was constituted, for the Collector asked me whether I was willing to be a witness. I said my knowledge was limited and my evidence would not be of value.

The population of Bimlipatam is about 9,000. The number of smokers will be about 50. Among agriculturists the use is less than among people living in towns. The only injurious effects that have come to my notice are that in the case of three persons steeped in the use of the drugs they have become listless and almost insane. The moderate use does no harm, except that it tends to the excessive use. This is the only harm. I do not know any moderate smokers who have not shown

this tendency. The number of times of using the drug is increased. All this is based on the observations of a few months. I have never watched it before. There are smokers whom I have asked who have described this tendency to increase as an imperceptible influence. This seems less to apply to bhang. The smoking is more injurious, as more likely to tend to excess. I have seen cases of drinking bhang which have been attended with good results: the bhang has been beneficial. I am not aware of any such case in regard to ganja. I did not know before beginning this inquiry that there were 50 smokers in the town. I have since inquired from the ganja shopkeeper, and visited his shop. I have also tried to find out ganja smokers from one or two other sources. And what I have said above is mainly based on what I have ascertained from, and in respect to, these ganja smokers. Before I began this inquiry I had a general impression that hemp drugs were injurious, but I had no knowledge of any case in which injurious effects had occurred. My inquiries have been mainly confined to the town of Bimlipatam, but I have also obtained some information

in Vizianagram. I have made no direct inquiries in villages, but I do not believe there is injury in the interior, for the village officials tell me the custom of using the drug has been hardly ever noticed there.

Question 59 — When I have asked people why they stick to the use of this injurious drug, some have said that it is due to the difficulty of getting liquor. And as the thing is a small thing, *i.e.*, as the smokers are so few, I do not see why the use should be restricted. There is no harm to others in the ganja smokers. They are few, that is the main reason why the Government should not

restrict. I think ganja is worse than liquor. It would therefore be better to raise the price of ganja so as to drive the people from it. I do not think that restriction could give rise to adverse public sentiment, because to smoke is disgraceful and no one would acknowledge it. No one could come forward, because he could not say I want to smoke ganja or drink bhang. The growth in the house is very small, and cultivation could be repressed. I cannot speak for the Agency tracts. I think the cultivation or growth of hemp in the back-yards or gardens in the district tracts should be prohibited. That is how I should propose to raise the price of ganja.

183. *Evidence of MOKHALINGAM APPANNA, Ganja Vendor, Coconada.*

1. As I have been a ganja vendor for a long time, I am able to give some information regarding the properties, etc., of ganja.

3. I am not aware of any district in which ganja grows spontaneously. It grows abundantly in Daggupadu, Kruttipalem, and Banganapalli.

14. Some people plant ganja plants after removing the leaves from them, separate that portion of the plant called kali, and smoke the same. Bhang is prepared, but in small quantities. It can be prepared by any man. Charas is not prepared in this district.

16. Bhang can be prepared by all people in their houses. For the preparation of the same as well as ganja, hemp plant grown in all places is useful. But charas cannot be prepared from the plant grown in this country.

19. Ganja and charas are used not only for smoking, but also in the preparation of medicines.

20. All classes of people smoke ganja. The proportion of the ganja-smoking population is one-fourth.

24. Bhang is drunk by Bondilis and the Bengalees. Its use is very rare.

25. The use of ganja and bhang is neither on the increase nor on the decrease, but normal.

28. The average cost of these drugs for a man for each day is 1 or 1½ pie.

32. I do not know.

33. The consumption of ganja is looked down upon as mean.

39. I do not know.

40. These drugs are used as ingredients in the preparation of medicines, but by themselves they do not serve as medicines. These drugs are not used in the treatment of cattle disease.

41. The moderate use of ganja is beneficial, as it removes the effects caused by a change of climate.

43. Moderate consumers are not offensive to their neighbours.

44. The moderate use of ganja is refreshing. It produces a little intoxication, but does not make the consumer senseless. It creates hunger, but does not allay it. If a habitual consumer does not use it his belly bloats.

45. The habitual moderate use of these drugs does not produce noxious effects—physical, mental or moral.

51. The consumers of ganja, etc., are never known to have committed any crime or done any injury.

54 and 55. No.

184. *Evidence of PERIANNA CHETTY, Potter, Ganja Shop-keeper, Kitchipolayam, Salem.*

1. My answers are based on my experience as a ganja shopkeeper for the last twenty years, and on the information furnished to me by those with whom I have been dealing in that capacity.

3. In Javadi hills of the North Arcot district.

14. Ganja and bhang are prepared in Salem town only to a small extent. Charas is not prepared in this country.

16. Bhang is not generally prepared by the people in their houses. It can be prepared from the ganja plants wherever grown. Ganja can also be prepared from the hemp plant wherever grown.

19. Ganja is used chiefly for smoking. There is another mixture of ganja, called majum, which is consumed by some for intoxication in these parts. Ganja is used for medicinal purposes to a small extent in this district. I know nothing about charas, and it is not much in use in these parts.

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20. Ganja is smoked by the following classes of people:—Gosaius, Mahrattas, Muhammadans, Rajputs, and a few other Hindus. Ganja is used by a very small percentage of the people. It is used in Salem, Chittur, Coimbatore, Madura, Trichinopoly and Tanjore districts. Charas is not known to be in use in Salem.

24. (a) Bhang is used for eating by fakirs, Muhammadans, Gosaius, Mahrattas, and a few other Hindus in Chittur, Salem, Coimbatore, Trichinopoly, and Tanjore districts, and the proportion of the people that resort to the drug is inconsiderable.

(b) Bhang is drunk by the above classes of people in the localities mentioned above on a small scale.

25. The use of both ganja and bhang is on the decrease, as the people have now to purchase them from licensed vendors alone. Charas is not a drug well known in these parts.

28. Ganja and bhang—quarter of a tola each per diem, the cost being four pies per tola. Nothing is known about the charas.

32. There are no such customs.

33. The consumption of these drugs is generally condemned by all classes of people. The use of the narcotic is in disrepute, because it tends to enervate the system and ends in debility. There is no custom of worshipping the hemp plant by any class of people on any occasion.

39. The smoking of any preparation of the hemp plant is more injurious than the drinking or eating of the drug, inasmuch as it affects the lungs and the brain.

40. Some native doctors prepare certain medicine with ganja, mixed with other things, as antidote for diarrhoea. It is also used in the treatment of some cattle diseases.

41. The use of any of these drugs is not beneficial in its effects.

42. The use of the drugs is harmful, except when it is used for medicinal purposes.

43. Yes; they are inoffensive.

44. It produces a sort of dullness and intoxication. It is not refreshing. It produces intoxication. It does not allay hunger. The effect lasts for two or three hours. There are no after-effects. The want of it produces a kind of uneasiness in the case of habitual consumers.

45. It produces noxious effects as regards the physique, in so far as the habitual consumer suffers from incessant cough in later age. As regards the mind, the habitual consumer becomes imaginative and mad at times after the consumption, and recovers his sense later on. It does not materially affect the morals of the person resorting to it.

51. No; the moderate use of this drug will not result in the commission of any crime.

53. No.

54. No; as soon as one consumes the drug, he becomes dull on account of intoxication, and so he will not be able to commit any crime of a grave nature.

55. Yes; they sometimes do so. Complete stupefaction requires some admixture.

185. Evidence of KAMALAPURAM NAGAYYA, Komati, Ganja Contractor, Adoni.

1. I sell ganja by retail to habitual consumers. I have had no other opportunities except this.

3. It is abundant in the following places, viz.:—Duggupad in the Cuddapah district; Alam-nur, Nandyala taluk, Kurnul district; Shumshabad, and Umnabad.

14. No; but it is grown scarcely here and there, one or two trees in back-yards in many villages.

16. (a) No.

(b) and (c) Not known.

19. Ganja is used only for smoking purposes. I do not know whether it is used otherwise.

20. Bairagis, fakirs, sanyasis, and some other low caste men. About 76 per cent. of the population of Adoni town use this, and people in some villages of this taluk as well.

24. Not known.

25. The use of ganja is on the increase, for the price of liquor has been raised.

28. Half tola ganja is the average allowance per diem. Its cost is two pies.

32. Ganja is consumed generally on all occasions, and at times when friends meet together in houses or other public places or on occasions of funeral ceremonies.

33. The use of this narcotic is considered to be in disrepute if used by respectable family persons. There is no custom of worshipping the ganja plant.

39. It is said that smoking is considered to be

less injurious than drinking or eating the same, but I cannot give reasons from my own experience.

40. Yes; it is used both for purposes of medicinal qualities and the treatment of cattle disease.

41. Yes; if persons are suffering from any disease, the use of ganja or bhang will somewhat alleviate their sufferings for the time, although it might be injurious to their health.

42. It is said that even the moderate use of ganja habitually makes a man sometimes insensible or forgetful.

43. About 50 per cent.

44. The immediate effect of the use of ganja makes a man happy for the time being. Unless the habitual consumer uses the quantity as usual he will not have any refreshment. Yes; it does produce intoxication. It does not allay hunger, but, on the other hand, it creates appetite very much. It lasts for two hours. It is not known whether it has any after-effect. The want of subsequent gratification produces longing or uneasiness.

45. The habitual moderate use of ganja produces noxious effects, physical, mental or moral. I know this by personal observations. I cannot give an account under each of these points.

49. I know nothing on this point.

51. (a) Yes.

(b) Almost all criminals use either liquor or ganja moderately before they prepare themselves for perpetration of crimes in general.

53, 54 and 55. Not known to me.

186. Evidence of ABDUL KHADER, Agent of the Ganja Shopkeeper,—Rajahmundry.

1. My *sowcars* bid the right of selling ganja at Guntur, Bezwada, Sattinapali in the Kistna and Ellore Koorum and Rajahmundry in the Godavari district. They also purchased the right of vending in ganja at Coconada, but they sublet it to a *kamati* of Coconada.

On their behalf I sell ganja here. I sell only

one sort of ganja, raised in Daggupadu in the Kistna district. At Daggupadu ganja is grown as a crop and exported to different quarters. In this country also some are cultivating the hemp producing ganja in their back-yards and sell the stuff privately. I hear that some wild grown ganja is used by the hillmen.

2. Charas is a sort of gum taken from ganja which is used for smoking ; it is not manufactured in this country. It is manufactured in Central India. After the ganja is cut it is packed in gunny bags, when it is trodden slightly to make the bag contain more. The ganja grown in Vizagapatam district is in the form of a tuft.

3. In Nellore, Kistna and Vizagapatam districts this is grown, and spontaneously in regar clay lands, hill tracts. At Dagupadu, about 100 can-dies are raised. In the Vizagapatam district, Vaddadi and Madugob are the chief places. In the Nellore district, Kudithipalem.

4. Chilavati (stuff in the form of tufts), is so manufactured, being pressed into a cake. Manu-factured in the Vizagapatam district.

Country grown ganja.

Powder taken from this is said to be bhang, and it is used for making ganja or bhang.

They are all from the same species of plant.

5. Land fit for dry cultivation. Black soil (clay) suits well. It is generally grown in winter. Rains damage it. Does not grow on saltish ground.

I cannot say anything about the growth of the wild hemp.

6. I cannot say.

8. There is no cultivation of this hemp in the Godavari district as in the other three districts. After the system of selling the right of sale has been introduced, the cultivation has decreased.

9. First, beds are formed and seedlings raised and transplanted, leaving half or one-third yard space between the plants. The transplantation goes on generally in the month of October.

After the tree commences to throw out resin, rain spoils the crop. Generally in February and March the ganja is cut. The male trees are removed. Only the female trees are retained. Generally the male is distinguished from the female, because the former bears flower.

10. There is no distinct class of persons who cultivate hemp plant. Classes as other agri-cultural cultivators generally cultivate this.

11. The seed taken from the ganja originally sold are sown.

13. The cultivation does not seem restricted. It can be raised anywhere. Black regar clay produces the best sort.

In the latter part of the rainy season seedlings are sown, and early in winter it is transplanted. Saltish land does not at all suit this hemp.

14. In the Godavari and Kistna ganja only is manufactured, but not charas or bhang.

15. People here very seldom eat, some drink bhang. Many smoke.

16. People prepare bhang in their houses. In this part of the country the juice of ganja mixed with milk and sugar is said to be bhang, which is drunk occasionally by northern India people who have become residents here. During the Holi-festival it is much used.

17. All classes that are in need of it without distinction of caste.

18. By keeping long these drugs no doubt deteriorate. It becomes useless after 1½ years. It loses its effect in time. Up to one year it retains its strength. As the resin diminishes the stuff deteriorates. There are no means to preserve its efficiency after one year.

20. Fakirs, gosains, bairagis and jogis use much. Military people use a little. Weavers use much. No particular class uses this. Coolies also some-times use it. Ten per cent. of the populace in towns use this. Dagupadu stuff is used for smok-ing.

21. Ganja (round) is preferred for smoking. Charas is used largely in Hindustan and Central and Northern India. Ganja (flat) is used in the Vizagapatam district, in Nellore district, and in Madras.

22. Charas is not used at all in this district.

23. Bhang is not used at all in this district for smoking.

24. Marwaris, Rajputs (Bondilis), Bengalees, and also Hindustani Muhammadans drink bhang. During the festival, in honour of Khama (Man-matha or Cupid) they all drink. These people are generally to be found in Tars, where there is much commerce.

25. The use of ganja is now on the decrease. Since the introduction of the renting system for the sale of ganja the drug is sparingly used.

Ganja—	Bhang—
(a) 60 per cent.	(a) none.
(b) 20 "	(b) "
(c) 5 "	(c) 20 per cent.
(d) 15 "	(d) 80 "

Charas—

None.

28. Ganja—

- (a) Half a tola a day, which costs 3 pies.
(b) Five tolas a day, which costs 2½ annas.

29. Tobacco is ordinarily mixed with ganja for smoke. This ingredient is a necessary adjunct. Dhatura is never used as an ingredient.

I know the preparation of bhang massala for the purpose of mixing it with bhang. Its ingredients are:—Poppy-heads, cardamoms, mace, nutmeg, aniseed, dry ginger, pepper, dried cocoanut, sugar and milk, etc.

30. (a) Very few in solitude ; the rest enjoy the smoke of ganja (round) in company.

(f) It is mainly confined to the male sex. The use of it is confined to persons between manhood and old age.

(e) Very rarely it is used for the use of children.

31. The habit is very easily formed. It is very difficult to break off the habit. There is a ten-dency for the moderate use to develop into the excessive.

37. Charas is not used in this district, hence the difference cannot be said. But it is said that charas is a stronger stuff than ganja in its effects.

187. Evidence of T. RATNASAMI NADAR, Arrack Supply Contractor, Malabar.

15. (A). *Smoking*.—The prepared ganja is first rubbed and cleaned with a few drops of water and then mixed with tobacco and smoked in a country pipe.

(B). *Eating*.—The ganja sold in the market is bought, and after being mixed with dried ginger,

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pepper, and other spices and kneaded with milk, ghee and sugar and formed into a paste.

(C). *Drinking*.—The ganja is mixed with cocoa-nut milk, and flavoured with sugar, cardamoms, and other spices forming a kind of syrup.

18. The ganja, if well prepared, generally re-

tains its effect for one year, after which it deteriorates.

19. Ganja, besides being smoked, is also eaten and drunk, as answered in 15 (B) and (C)

20. In southern districts, about 5 per cent. of the population are addicted to the use of ganja, chiefly wandering mendicants and bairagis.

21. Flat ganja is the only kind which is sold in these parts.

25. The use of ganja is apparently not on the increase. This may be owing to the increasing use of Europe and country liquors.

26. Of the 5 per cent. addicted to the use of ganja, as stated in answer 20, the proportion of consumers under heads (a), (b), (c) and (d) seems to be equally distributed.

27. This practice seems to be chiefly addicted to wandering mendicants owing to the fatigue and other hardships to which their wandering life exposes them. The practice seems to be more common in these parts among the Muhammadans than among Tamilians.

29. Tobacco is generally mixed with ganja and smoked, the object of admixture being pungent taste given by the tobacco. Dhatura is not so used in these parts.

I have not heard of the preparation called bhang massala.

31. The habit is easily formed, as smoking and drinking are, and also, like those practices, difficult to break off after using some time. The moderate use generally develops into the excessive.

32. To the best of my knowledge, the use of ganja is not connected with any customs, social or religious; but I believe the plant is looked upon with some reverence by a few Hindu priests.

33. (a) Those addicted to the practice of consuming ganja in any of its forms are generally looked down upon by respectable people.

(c) The hemp plant is not generally worshipped.

34. Naturally it must be felt as a privatio

to all those who resort to the use of these narcotics.

35. If this practice be prohibited by law, it would probably result in illicit consumption. The prohibition would certainly cause dissatisfaction; but, if proper precautionary means are taken, no danger may be apprehended. The prohibition would, as a matter of course, be followed by recourse to some other form of stimulants.

36. Those, who can afford it, might prefer alcoholic stimulant to the use of ganja. As the latter is cheaper than the former, there is no reason to think that the use of ganja would become entirely superseded by the use of alcoholic stimulants.

39. The effects of smoking ganja are worn out sooner than effects produced by its absorption in any other form.

40. Ganja seems to be prescribed as a medicine, but apparently not to a great extent. I have not known of its being administered to cattle.

41. The use of ganja is popularly supposed to assist digestion, and it is also for its power to alleviate fatigue by mendicants, who are always travelling from one place to another.

43. Moderate consumers are not offensive to their neighbours.

44. Immediate effect is intoxication, and it probably stimulates hunger.

45. The moderate use of ganja, if not productive of any good, does not produce much ill effects.

47. The habitual moderate use of ganja does not appear to be a hereditary habit.

49. The moderate use of ganja is popularly believed to be aphrodisiacal. Prostitutes use it for this purpose. An artificial excitement of passion must be productive of injurious effects. Some preparations of ganja are used for producing impotence.

53. I am not aware of any such instance.

54. Ganja is used for this purpose.

55. Ganja is sometimes made into a kind of sweetmeat for kidnapping children.

188. *Evidence of MULAGULA KONDIAH, Goldsmith, Rajahmundry.*

3. It is not cultivated much in this part of the country. It is only grown here and there in compounds.

4. In this country it is known by the only name of ganja.

5. In cold climates it grows luxuriantly. During winter it is grown.

6. Growth of wild hemp would not be ordinarily dense. It would be scattered. Only in places frequented by gosains this is found.

7. No; except in compounds, only ganja is grown.

14. Only ganja is prepared of plants grown in compounds.

18. It deteriorates when it gets wet, and, if kept more than a year, it loses its power gradually by time. Loses its properties after one year. If charas is mixed and kept, it keeps for two or three years.

19. Ganja is used much for smoking.

Juice of ganja mixed with sugar, milk, with addition of spices, is used as beverage for cooling

the system—used by Marwaris and other northern country men, even in this country.

20. All classes of people use ganja for smoking.

21. Flat ganja is preferred for smoking.

25. Almost every man uses this now; formerly only devotees used to use it.

26. One-fourth of the population use it. Habitual excessive consumers are devotees.

28. Daily six tolas is smoked by habitual consumers.

29. Tobacco is generally mixed with this. No dhatura is used. If used, it would prove poisonous.

30. (a) Some use it in solitude, some in company. Some who do not care for the public, use it openly.

(b) Males only use it.

(c) Children do not generally smoke ganja.

31. For four or five days, difficulty is experienced in practising it. There would be a tendency

to develop into excessive if the moderate habit is not carefully observed.

32. Some people accustom themselves to it by associating with people who use it.

Gosains and fakirs use it for religious purposes. By devotees its use is considered essential. Suppresses sexual inclinations.

33. The devotees worship this plant.

34. The habitual consumers suffer from dragging pains of legs and sleeplessness for want of the drug.

35. The prohibition of cultivation of this drug creates discontent among consumers. The prohibition may be followed by recourse to stimulants, alcoholic or other.

37. I know only of ganja. Bhang and charas are not procurable here.

38. I know only of round and flat ganja. Round ganja is uncured and flat ganja is cured stuff. Round ganja would not be as healthy as flat ganja.

39. In cold climates ganja is eaten raw. Some eat ganja for the sake of more intoxication than what is caused by smoking. Smoking is less injurious.

40. (a) It is also used as medicine for dysentery, or temporary relief for cough.

(b) I do not know that it is used for cattle diseases.

41. If moderately used, it serves as a medicine to remove effects of bad and different waters.

(a) Gives good appetite and assists digestion.

(b) Alleviates fatigue; removes water from blood.

(c) It serves as a preventive of malarious fevers, etc.

(d) Various sorts of preparation of ganja is used for native medicines, called Lahams, halwas.

After a man becomes a jogi all classes use it. Several family men use it occasionally. Women use it frequently. Fakirs and bairagis use it frequently.

42. It is only beneficial for devotees if used moderately. Moderate use is harmless.

43. Moderate consumers do not have much inclination for sexual intercourse, and their passions would subside, so they would never be offensive to the neighbours.

44. Intoxication is produced immediately after its use by habitual consumers. It concentrates his mind, keeps it steady and undeviating. It is refreshing. It produces moderate intoxication. It promotes appetite. The effect lasts for three hours. The man becomes quiet and free from passions. Want of subsequent gratification pro-

duces longing. It may also produce bad effects such as diabetes, etc., if it is given up by moderate habitual consumers.

45. Habitual moderate consumers of ganja do not turn weak as long as they eat well a sufficient quantity of ghee and sweets made of ghee. It produces bad effects on the mental qualifications of men of business. They become slow and quiet in thinking powers. Those who use ganja in moderate doses become morally good characters.

If sufficient ghee and strong food is not taken, it impairs constitution. Immoderate use also produces bad effects.

If immoderately used it creates dry cough, but not asthma.

It does not impair moral sense. It induces laziness, but not immorality or debauchery.

If immoderately used, it no doubt deadens intellect and sometimes it produces insanity, sometimes temporary and sometimes permanent. The bad effects of ganja can in some cases be cured by administering lime-juice, honey and water.

If raw ganja with seeds is used, it may become poisonous.

47. This does not create hereditary habit, nor does it in any way affect their children.

48. Habitual excessive use may produce various bad effects—lungs, heart and liver may be affected; insanity, laziness, etc.

49. Sometimes different forms of preparations of the drug may be used as an ingredient in some halvas, etc., to be used as an aphrodisiac; but they do not, I believe, give effect. Females never use it. Prostitutes also do not use it. Its use in any form always injures the inclination for sexual intercourse.

51. (a) Some bad characters do not use this drug, because it suppresses passions, creates timidity.

(b) Habitual consumers, sometimes in a state of intoxication, may take away things which do not belong to him, whether with or without consent of their owners. As timidity is produced, habitual consumers of this drug do not commit grave offences, as murders, robbery, etc. If habitual smokers of ganja also use arrack, they dare do any mischief.

53. This drug alone does not incite to unpredicated crime, violent or otherwise.

54. These drugs are not used by criminals.

55. No; it does not produce complete stupefaction as alcohol.

56. It is not mixed with dhatura for personal consumption or for administration to others.

57. People in cold climates eat much of ganja; scarcely in other parts. It is used to keep themselves warm and intoxicated.

60. Ganja is not publicly cultivated in this country. It is only grown in some compounds.

189. Evidence of ANGAPPA GONUDEN, Blacksmith, Salem.

1. I came acquainted with the mode of cultivating the (hemp) ganja plant some twenty-five years ago. I have been ever since practising it.

2. Not known in these parts.

This definition accurately applies to the ganja known to me and in use generally here.

There is only one kind of ganja known in these

parts, and that is flat ganja. It is made flat by being subjected to heavy weights and not by being trodden under foot.

I have not heard of any but ganja. I know ganja only. The plant from which this is had is called ganja plant. It is known here by no other name.

3. About forty years ago wild ganja plants were abundant on the Shevaroyes. I saw them there; but I do not know whether they are to be found there now. Since then I have not seen abundant spontaneous growth anywhere else.

4. The plant is known in these parts by one name only, *viz.*, ganja plant.

5. It grows well in alluvial and black soils. All that is wanted is good manure. Elevation is necessary for spontaneous growth.

6. The growth of the wild hemp was observed by me to be both dense and scattered. It was for the major part scattered.

7. There is a little of the ganja plant cultivation in my district of Salem. They are all for the production of ganja alone. One-fourth of the houses of Salem have on an average half a dozen ganja plants in each back-yard. The same number of plants can be found in at least 2 per cent. of the fields in the villages of Salem, Ather and Nama-kal taluks.

8. Hitherto cultivation of the ganja plant was very rare. But it has now considerably increased, since more people resort to its uses now than before.

9. The seeds are sown at first and the small plants are then transplanted. Sheep dung and fowls' dung are its chief manure. Much depends on the prunings and proppings to produce good ganja.

10. Except the Brahmins, Komutties, and Pieresinites, almost all other people cultivate it. The cultivation is not restricted to a particular class.

11. Yes.

12. We don't distinguish between wild ganja and domesticated ganja. What you call hemp are called ganja. I have heard of immense cultivation of ganja on the Javadi hills in North Arcot district. Everywhere the male plant is done away with.

13. None here restricts the cultivation of ganja. I do not know of any district where it is restricted. No special conditions are necessary for the cultivation of ganja. Of course a high level helps the growth. It can be grown anywhere if one knows the methods.

14. Charas and bhang are new names to me, and I know not what they are. Ganja is the only natural product here known of, though we make matti lahiam and poornathi from it.

15. (A) Ganja is had naturally from the flowering tops of the plant. All that is required to make it useful is to look to the ripe time, pluck it out, and put it under weight and dry it. This is used in this state for smoking.

(B) Ganja is fried, powdered, and mixed only with jaggery and ghi and then eaten. It is also boiled, and the juice mixed with sugar, ghi, and several other ingredients is called poornathi. This is also eaten.

(C) It is not drunk here in any way.

16. All ganja, matti lahiam and poornathi are generally prepared by the people in their houses. These can be prepared both from the wild and domesticated plants wherever they may be grown.

17. I can mention no particular class.

18. Ganja can be kept for a year. It certainly deteriorates by being kept. Matti lahiam and poornathi can last for no more than a fortnight. As I know ganja alone, I shall hereafter speak of that only.

19. Ganja in its ordinary and raw state is used for smoking only. If made into matti lahiam and poornathi it can be eaten.

21. Flat ganja alone is used in these parts.

25. The use of ganja has considerably increased during the last one decade. I am now 60 years old. While I was 35 there was not even a fourth of the present use. The spread of the use is entirely due to bad example.

26. (a) and (b) Of the consumers of ganja in any form, there will be only 15 per cent. who are habitual excessive consumers, the rest being habitual moderate consumers.

(c) There are no occasional consumers at all. Once they get to the habit, people can never shake it off.

27. These consumers are mostly taken from the artisan, weaving and other labouring classes. It is the muscular exhaustion and pain caused by hard and incessant labour that leads people to this sort of intoxication.

28. (a) Habitual moderate consumers require between one and three pies ganja a day.

(b) Excessive consumers can take no more than one anna ganja a day.

29. (a) Tobacco is ordinarily and always used mixed with ganja while smoking. With tobacco there will be no intoxication in smoking ganja. To be eaten as matti lahiam, only jaggery and ghi are mixed with fried and powdered ganja.

(b) To be eaten as poornathi, which is exceptional, some mix fig seeds, banion seeds, nutmeg, cloves, etc., numbering 68 kinds, including ghi and jaggery. I know not what bhang massala is.

30. Smoking ganja is always invariably practised in company. Ganja eating is generally practised in solitude. Ganja smoking and eating are generally confined to the male sex. But there are a few women also who, I know, do both with ganja. In its poornathi form it is given to children to cure them of mautham or indigestion occasionally, but never daily.

31. The habit is easily formed within a week's time. It is afterwards difficult to break it off, though a resolute mind can do so with much difficulty. The habit very naturally and unobservedly leads to excess.

32. Ganja is considered by the people as a sacred sacrifice to Idumbau, Karuppan, Veerabdran, Maruda Veeran, Muniappan, and such other devil deities. Sacrifice of ganja is essential in worshipping the above deities. Small quantities would do sacrifices like these; generally bring about the habit.

Gifts of ganja to pardesis or sanyasis is considered to be a great piece of charity. Several people have built public places for the purpose.

33. Ganja smoking and eating are universally looked down upon by the people. Those who consume it certainly suffer a social degradation. The habits are held in disrepute, because they result in mean habits on the part of the consumer. The ganja plant is not worshipped. It is only ganja that is offered as a sacrifice to the deities.

34. It will be a great hardship to the habitual consumers to forego the consumption. But absolute prevention will not bring about insanity or death. For two or three months the consumers will and can think of nothing else. Then it will be all right.

35. It will be impossible, in my opinion, to prohibit the use of ganja. In some way or other,

it will be consumed by the people; for who can say in what corner of his field the consumer cultivates it. It must be impossible to enforce prohibition. The consumers would feel discontented; but they would not have recourse to violent actions. The consumers of ganja are specially too timid to do any such thing. The prohibition will lead people to take themselves to other intoxicants.

36. No reason to think so. Well-to-do people scarcely take themselves to ganja, but prefer liquor. It is only the poor that resort to the cheap intoxicant of ganja, and so these don't substitute liquor for ganja.

39. Smoking ganja is less injurious than eating it. Eating produces (mind that it is never eaten in the raw state, but only in the form of lahiām and poornathi) head giddiness, and excess sometimes brings death to the consumer.

40. Ganja is said by native doctors to be a medicinal drug. It is extensively used as such.

41. (a) Ganja consuming can be of benefit only temporarily, the effects ceasing as soon as consumption ceases.

(b) Smoking gives, though temporarily, such staying-power as is referred to and alleviates pain (pain not being felt only so long as the intoxication exists).

(c) Smoking (eating is useless) in malarious tracts is an efficient preventive of disease.

(d) Eating brings the man down to senselessness immediately. Smoking keeps the man cheerful, wise, and in a state of alacrity. It is only the working classes that make these uses of ganja. I refer here to habitual consumers.

42. I cannot say that any use of the drug is quite harmless. It gives some temporary relief no doubt. But ultimately it weakens the constitution, and actually dries it up.

43. Moderate smokers are quite inoffensive to their neighbours. Eaters do mischief very rarely. Generally they are all timid.

44. Eating is out of question here, as it produces giddiness. Smoking refreshes, intoxicates allays hunger, creates appetite.

The effect lasts for four hours at the utmost. It has no after-effects. Want of subsequent gratification certainly produces a longing for it.

45. (a) and (b) The consumer looks like one suffering from consumption. The flesh is reduced, and the man becomes thin.

(c) No loss of appetite is produced.

(d) Smoking does not generally produce the disease, but only rarely eating invariably does.

(e) Smokers are always brisk. Eaters become gradually very lazy.

(f) Smoking does not, but eating does deaden the intellect; but insanity is extremely rare. I have simply heard of one or two cases of insanity. Such insanes go and ask for ganja from any body. But I know nothing more of this kind of insanity.

47 and 48. It is not a hereditary habit. It does not affect children.

49. I do not know all these. But I have heard that this drug in whatever shape cannot materially help prostitutes. It temporarily helps the debauchee, but ultimately lessens his manly faculties.

51 and 52. Crime and consumption of ganja are far from each other. Consumers of this drug in any shape are specially timid, and do not resort to acts of violence.

53 and 54. No.

55. Ganja is generally used by the non-consumers of it to induce stupefaction for the perpetration of crime. Complete stupefaction can be brought about in less than an hour with the help of this drug and its admixture.

56. Admixtures soften the intoxicating power of and deprives the ganja of its poisonous effects.

190. Evidence of MALLAPPA, Reddy, Guntakal.

1. I have made enquiries of persons using the drugs, and I have heard much of these matters.

3. The plant grows in this village in gardens and black soil fields.

14. Charas and bhang are not prepared here, but only ganja.

16. No bhang here. Ganja can be prepared at any place.

19. Ganja is used only for smoking.

20. All classes smoke ganja. About 10 per cent. use this.

25. The use of ganja is on the increase.

28. About three tolas per diem is the average, and the cost is nearly one anna.

33. There is no weight attached to the sayings of a man smoking ganja. He is not regarded as an honourable member of society. The plant is not worshipped by any people.

39. Smoking is less injurious than eating or drinking.

40. Ganja is prescribed by some Native doctors

for men for strength, and for cattle for some diseases, such as want of desire to milk, etc.

41. No.

42. The use of any of these drugs is not harmless.

43. They are inoffensive, and on the other hand, cannot defend themselves against any aggressors.

44. The man's reasons are blunted, and he is not capable of right thinking. The drugs do not refresh anybody. They produce intoxication. They increase hunger and appetite. The effect lasts one or two hours. They are dull in senses. Want of subsequent gratification produces longing for more.

45. The habitual use of these drugs degrade a man physically, mentally and morally.

51. Bad characters are not habitual users of these drugs.

53 and 54. No.

55. Criminals use these drugs to stupefy their victims, and rob them of their property. The drugs are mixed with sweets and then administered to the victims.

191. *Evidence of SAMDASU BAVAJI, Brahmin, Priest in the Matt of Sri Jagannadha Swamy, Rajahmundry.*

3. Malwa and Indore are places where much is cultivated.

4. Charas is a sort of juice taken out from ganja trees by covering a cloth on it and taking out the resin.

Ganja is the head containing some unopened flower and small leaves.

Bhang is another sort yielding flowers.

These two are of the same species, but they are said to be male and female trees, the latter yielding the stuff called ganja.

5. Northern country where the climate is temperate this thrives well.

6. In the jungles of Northern India this hemp is found ordinarily dense, but in scattered places.

11. The ganja found in jungle is quite different from that found in villages.

14. No cultivation in this part of the country.

15. I know of no people eating ganja. They smoke. They drink a preparation called bhang (made of ganja leaves, juice, sugar and milk, pepper, sounf).

16. Family men (Marwadis, Gujratis) make a sort of beverage called bhang, and drink it during festival days.

A preparation of ganja is mixed in lehams and halwas.

18. It lasts until one year and afterwards loses its properties gradually.

19. Ganja and charas both used for smoking.

20. Gosains, jogis, bairagis, fakirs, labourers, weavers and even family men without distinction of caste use it. It is smoked.

21. Ganja manufactured in Rengal is good for smoking; round ganja produces more heat than flat one.

22. Charas is procurable in the Northern India where snow is much.

23. Bhang also is used for smoking. It is much used in Northern India.

24. All classes use it. Very few of the people use it.

25. Increased. Formerly through fear people did not use much; now as freedom increases, the bad habits also are increasing.

26. I cannot give particulars.

27. Gosains, fakirs and sadhus smoke ganja. Family men are prohibited from using it now. Several bad characters are also using. Some family men also are using it.

28. Habitual moderate consumers use one or two tolas per day.

Habitual excessive consumers use three or four tolas per diem.

29. In this country ganja is ordinarily mixed with plain tobacco.

Sadhus mix tobacco and also (nablie) aconite and snake poison also. Those who live on Himalayas generally so use to keep themselves warm.

I do not know dhatura being mixed.

Those who suffer from asthma and severe cough smoke dhatura separately.

In bhang massala the following articles are

mixed:—Spices, sounf (anise), cardamoms, poppy seed, pepper (mittulaledi), liquorice, coriander seed, cucumber seed, jaggery, ganja or bhang, all in equal shares.

30. Beverages can be taken in company. Smoking is practised in solitude.

Males only generally consume. Children do not generally consume these drugs.

31. Habit of consuming these drugs can be easily formed. It is also difficult to break off. There is tendency in the case of any of these drugs for the moderate habit to develop into excessive habit.

32. The use of ganja is not considered as an essential to social or religious customs as some say. Sadhus smoke ganja limitedly, but not in excess. If it is excessively used, it may prove injurious.

33. The consumption of these drugs is neither regarded nor disregarded. Only in the case of bad characters who use it in excess it is not regarded.

34. To forego the consumption of the drug (used by some) would not in my opinion be a serious privation.

35. It would be feasible to prohibit the use of any of these drugs. Only those habituated to its use illicitly consume it only for a few days, because they may feel it difficult to break off at once. The prohibition would not occasion serious discontent to moderate consumers, but to those who use it in excess it may.

Sadhus do not addict themselves to alcoholic stimulants, but bad characters may.

37. Smoking charas creates more heat and intoxication than in ganja.

38. The effects of the different sorts of ganja will no doubt be different in creating heat and intoxication.

39. Smoking ganja is more dangerous than drinking treacle of ganja. The effects are different. Eating is bad. Eating in medicines gives different effects.

40. Native doctors use ganja in some medicines as an admixture.

41. Even moderate use is not a good habit. It does not produce any beneficial effects.

(a) Produces appetite; improves digestion.

(b) Does not give good effect in alleviating fatigue.

(c) May serve as a febrifuge or preventive of disease in malarious and unhealthy tracts.

(d) In cold climates the use of this drug would be beneficial.

42. I think even moderate use is not harmless, because it produces some bad effects, though it be beneficial in some respects.

43. Ganja smokers are not generally offensive to their neighbours.

44. If consumed in moderate quantity, it refreshes mind and body, produces slight intoxication, does not allay hunger, but creates it, provided the man eats good nourishing food. The effect of one smoke lasts for an hour. Excessive smokers may have after-effects such as laziness, languidity and dragging pain in legs.

In respect of habitual consumers, no doubt, longing and uneasiness is produced if they cannot get it again.

45. (a) Moderate use does not produce any bad effects, either physical, mental or moral, provided the consumers eat nourishing food, such as curd, milk, ghee, sugar, &c.

(e) It does not produce laziness or immoral habits.

(f) If no nourishing food is taken, the vital powers of a man are destroyed. If excessively consumed, it no doubt affects the system and may turn men lunatics or affect lungs.

47. The use of this drug can never produce hereditary habits.

49. Moderate use of this drug may serve as an aphrodisiac in case of men who eat rich and nourishing food, because in such cases it does not affect the vital powers.

51. Bad characters also consume this drug, but I cannot give any further particulars.

53. Excessive indulgence in these drugs may incite to unpremeditated crime or violence.

56. Even moderate use produces bad effects on persons sitting in one place. It produces no bad effect on persons who travel and frequent malarious places.

192. Evidence of BALDEV DAS, Brahmin, Priest of Hanuman Math, Rajahmundry.

1. Being a bavajee I have been in the habit of taking ganjyai for penitential purposes and am therefore acquainted with its qualities.

3. It is extensively cultivated in the village of Daggupadu, Kistna district. Neither of the other two (charas and bhang) are to be found there. I saw this growing in the forests of Parlakimeddy.

4. All the varieties of ganja are one and the same and belong to but one kind of plant. It (the hemp plant) contains certain resinous matter. That from which bhang is got simply flowers and dies away, but does not form a resinous coating. This is what is called the male hemp. Charas is not to be found in these parts. It can be got in Northern Hindustan. It (charas) is the name given to the resinous coating of the hemp plant.

5. Its growth is spontaneous. Wherever it is sown, or its seed happens to fall, it begins to grow. It begins to grow during the middle part of the rainy season and crops by the end of the winter. In this country people grow some one or two plants in their back-yards, and this, too, is rare.

6. Even the wild hemp does not grow spontaneously unless the seed is sown.

7. In this country people cultivate the hemp plant for the preparation of ganjyai. Charas and bhang are not prepared in these parts. In Northern Hindustan it is extensively cultivated, and charas and bhang are prepared to a large extent by the people of those parts.

8. Formerly ganjyai was used by sanyasis and bairagis alone, but now each and everybody who has a liking for it is in the habit of using it. Hence its cultivation also is comparatively enhanced.

10. No. Every one who wants it, to whichever caste he may belong, cultivates it.

11. I have never seen the seeds of the wild hemp sown in the plain parts. Those which generally bear the flowered tops, i.e., more appropriately the male plants, are taken off or extirpated. The wild hemp is extensively cultivated in Daggupadu, Kistna district, and also in Cuttack and Juggernaut.

14. In these parts only ganja is procurable.

15. I do not know the mode of its (ganja) preparation. I use this for smoking purposes and also for the preparation of bhang.

16. Yes, bhang is generally prepared in our houses.

18. Yes. They do deteriorate. If they are of the best quality, they keep good with ordinary care for two years. They gradually lose their effect by the lapse of time. If they contain the resinous matter as well, they remain for a longer period without losing their effect. Exposure to air is one of the principal causes of deterioration.

19. People commonly use ganja for smoking purposes and for the preparation of halvas. Charas is not procurable in these parts. It can be got in Northern Hindustan, where it, as well, is used for smoking purposes.

20. Bairagis, sanyasis, fakirs, labourers and men of loose character use this. Nearly a fourth part of the population are in the habit of consuming it. People of colder climes use it more freely and to a greater extent.

21. Round ganjyai is preferred, and charas is the best suited for smoking purposes. Chur is not procurable in these parts.

24. Marwadis, Guzaratis, people of Malwa, Kathiawar, etc., use bhang to a large extent. They mix it with milk, sugar, and spices, etc., and consume it for intoxicating purposes.

25. Every man is at liberty to use it. Formerly gentlemen were not in the habit of using it. Now-a-days there is no restriction in its use hence consumption has increased.

26. (a) Many.

(b) Not many.

(c) Some.

27. Everyone who has a liking for it, irrespective of either class or caste, use it.

28. Habitual moderate consumer uses it at the rate of one tola every week, which costs him 4 pies, whereas the (b) class of people consume some two or three tolas every week.

29. Tobacco is one of the ingredients. Ganja alone, without the admixture of any ingredients, is never used for smoking purposes. If so used, it produces cough. People who use it with the admixture of dhatura are very rare.

30. Bairagis, gosains, sanyasis, etc., use it publicly and in company; also ordinary gentlemen consume it privately. It is confined to the male sex only. The female sex use it very rarely.

31. (a) It can be very easily acquired.

(b) When once a person is habituated it is difficult for him to break it off.

(c) There is such a tendency.

32. To keep their minds steady in philosophical devotion and penitential purposes, men use it. Some think it necessary for religious thoughts. Those who consume it for religious purpose use it moderately. But the rest become intemperate and use it excessively. It becomes a habit, and, taken to excess, it is injurious to health. It is generally in disrepute, though not so with bairagis and fakirs.

34. No. It would be well to stop it, though it would be somewhat difficult to the habitual consumers.

35. (*Vide* remarks above, *i.e.*, against 34.) It does never amount to a political danger, and does not contain serious discontent.

39. The use of ganja for smoking purposes heats the body, raises its temperature, and, if taken to excess, results in the loss of semen. If taken with milk and sugar, it invigorates the person and strengthens the constitution.

40. Some of the native doctors use it for medicinal purposes. It is commonly mixed with salt and turmeric, and is given as a preventive for cattle diseases.

41. Yes. It has all the beneficial effects herein specified.

42. If used moderately it has some beneficial effects; but if taken in excess, it does injure the health.

43. Yes.

44. Its immediate effect is the production of heat and intoxication. It alleviates fatigue and creates appetite. It subsides anger. Want of subsequent gratification produces some longing in the person; but does not harm him or make him suffer in any other way.

45. To some it does; but if it suits the constitution and becomes a habit with the consumer it does not impair the health. If the consumer takes in milk, sugar, ghee, curd, etc., it strengthens him; but if not, *i.e.*, if he is not a man of good living, it weakens and thins the person. It does not injure the digestion, nor does it cause loss of appetite. It does not induce laziness, nor does it produce habits of immorality or debauchery, except in a very few cases. It may produce insanity if taken to excess.

Oral evidence.

Question 1.—I am an inhabitant of Lucknow. I am about 70 years old. I have been over

forty years at the Hanuman temple on the Godavary at Rajahmundry. I take ganja and opium. I eat a little opium and smoke ganja. I do this twice a day at food times. I get a pice weight of ganja for a pice; and this does me for the day two chillums. I have smoked ganja since I was twenty years old. I have only taken opium for ten or fifteen years since my constitution began to break up with years.

Question 20.—"A fourth of the population" is far too high an estimate over all as smokers. I think that one-tenth of adult males would be quite high enough. This seems to be a fair estimate for Rajahmundry. There would be about a hundred or two hundred consumers in Rajahmundry.

Question 29.—I have never taken dhatura. Those who take dhatura are very few, one in a lakh of consumers in Rajahmundry. Sanyasis, bairagis and more degraded consumers take dhatura. I have never heard of bhang with dhatura mixed in it being sold at temples. Bhang is used at the temples here, though less than in the north. I do not think that any bawajis in charge of temples ever take dhatura; a few wandering bairagis do.

Question 32.—"The rest" who go to excess are mainly Muhammadan fakirs and also bairagis. I have never seen excess here as I have seen it in the old days in the north of India among sanyasis, bairagis, etc.

Question 34.—I think that the drug should be prohibited for the common people, but left to fakirs and other religious persons. The latter by its help lead a life of contemplation on God. But the common people are destroyed by it. Mahadev used to take ganja, bhang and dhatura to a great extent. Ganja is Mahadev's bhuti (plant); and is used by his followers or worshippers. It does me no harm. I would not deny it to any one who benefited by it. It is only the excess that I want to prevent. A man who takes it much on the first time, and a man who takes to excess, will be damaged; but a careful consumer who moderates his dose is benefited.

Question 53.—From the taking of ganja, strength and courage are developed. But a ganja consumer will not commit crime. The drug does not incite to crime. The man who intends to commit a murder or dacoity will not take bhang. I have never heard of such a case. It is the respectable Marwari that takes bhang as a cooling drinking in the hot weather with spices. That is how bhang is used.

193. *Evidence of SYED SHAH ABDAL HUSAINI, Manager of Pencundah's Dargah, Pencundah, Anantapur District.*

1. I came to get information regarding the hemp drugs in my native place, where an annual ceremony usually takes place, and to which fakirs (beggars) from Punjab, Kashmir, Kandahar, and every part of India come.

3. It grows spontaneously on Javadi Mountains (Salem district), and in Humnabad, Kalyani (Nizam's dominions); they cultivate the plants annually.

14. Only ganja is grown in India, and charas and bhang are prepared in Afghanistan, etc. Ganja is grown to a great extent in India. And charas and bhang are prepared to a great extent in Yarkand, Kabul, and Kashmir, etc.

16. Bhang is generally prepared by people in

their houses, and also there are shops set apart for the preparation of the same. Bhang can be prepared from hemp plants, which may grow anywhere. Ganja or charas cannot be prepared from any wild plants.

19. Charas is used only for smoking and for nothing else. But we can say that there are two uses of ganja, that is, they are both eaten and smoked. It is eaten in Deccan and Upper India to a great extent.

20. Fakirs, sadhus, sanyasis, jogis, and bairagis smoke ganja and charas. Those of Northern India smoke charas, and those of Deccan ganja, because charas is not obtained in Deccan. Ganja is smoked to a great extent in Pencundah, Nagore, Sri-

rungam, Rameswaram, Cuddapah, and Shimoga district, etc.

24. The same as abovementioned eat and drink bhang. First of all, they rub ganja with pepper and mix it with water, and this solution is called bhang in Deccan; but charas is called bhang in Northern India. Those who have much heat in their bodies drink bhang, and those who are of cold nature smoke it.

25. The use is increasing and it is owing to the increase in population. Every day those who are fond of it are increasing.

28. Any man can get well intoxicated by spending a quarter of an anna in each.

32. They use this according to their custom and it is no religious observance at all.

33. It is regarded with contempt. Neither the social observers nor the religious ones allow the use of this. They regard the use of this as contemptuous, because they see that all who use this leave their wives and relatives without support and go away with the fakirs. There is no sect that worships these plants.

39. There is more injury caused in smoking it than in eating or drinking. In smoking it there is much injury caused, because it changes the features of the face, and the smokers become indolent and sick, and therefore they take to begging. Everything, whatever it may be, is digested by him. By walking a great distance he does not

feel tired. Cold does not catch him, even although he may go to cold countries. The climate and water of every place suits him.

40. The native doctors prescribe it as medicine for some diseases. They give this even to cattle for some of their diseases.

41. Moderate use of it will not be beneficial.

42. There is no harm or disadvantage, because its effects are brought into play when it is taken habitually.

43. They are inoffensive to neighbours, and they don't injure any one.

44. As soon as it is taken it brings on idleness; it refreshes; it intoxicates; it creates appetite. The appetite lasts as long as he smokes it again. When he does not take it, anger comes on him and also idleness, and he feels a headache.

45. By eating it he becomes stout, and by smoking it he becomes feeble. It brings on mental injuries when it is taken without being washed; but no injury is caused when it is taken after washing.

51. Bad characters do not use this. It has no connection with any crime.

53. Excessive indulgence does not incite to unpremeditated crime. No, we are not acquainted with any such case.

54. No, they do not use this for committing any crime or any act of violence.

55. No, they do not do so.



नमो भगवते



सत्यमेव जयते